

100

<210> 2185
 <211> 723
 <212> DNA
 <213> Homo sapiens

<400> 2185
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 60
 tctcttgtga ccctgcccgg agtcggtcgt aagaccgcca atgttgtttt aggtaatgcc
 120
 ttccgcatcc ccggaatcac cccggacacc cacgtcatgc gggatatctcg acgtctgggc
 180
 tggaccgatg cgactacccc cgccaagggtg gaaaccgacc tggctgagct ttttgacccg
 240
 tctgaatggg tgatgttggt tcaccgcctc atctggcacg ggccggcggcg ctgtcactcg
 300
 cggcgctcctg cctgccccgt atgcccgggt gccgagtggt gcccgctcctt cggggaaggc
 360
 ccaacggatc ccgaggaggc cgccacgtta gtccgggagc cgcgtcgatg agggggatga
 420
 acgttttcgg cgcggtgatg gccgccttga tgtttgctgg ctgcggggga gatgccccga
 480
 tagctcatca gcgtgaaaat gccggaatac cgggggtgctc gcatttgccg tcggggccga
 540
 ttgcgaaaag ttccggggccg gccacagagg gccggcccat gcccgatcac ggcttgcaat
 600
 gccttggtga ggggccgacg atctccatgt ctccggcgac atcgaggggc gtgaccgtcg
 660
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 720
 cgt
 723

<210> 2186
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 2186
 Xaa Ile Ser Met Gln Gln Leu Val Asp Asn Phe Asp Gly Ala Ile Pro
 1 5 10 15
 Asp Asp Leu Asp Ser Leu Val Thr Leu Pro Gly Val Gly Arg Lys Thr
 20 25 30
 Ala Asn Val Val Leu Gly Asn Ala Phe Gly Ile Pro Gly Ile Thr Pro
 35 40 45
 Asp Thr His Val Met Arg Val Ser Arg Arg Leu Gly Trp Thr Asp Ala
 50 55 60
 Thr Thr Pro Ala Lys Val Glu Thr Asp Leu Ala Glu Leu Phe Asp Pro
 65 70 75 80
 Ser Glu Trp Val Met Leu Cys His Arg Leu Ile Trp His Gly Arg Arg
 85 90 95
 Arg Cys His Ser Arg Arg Pro Ala Cys Gly Val Cys Pro Val Ala Glu

	100		105		110										
Trp	Cys	Pro	Ser	Phe	Gly	Glu	Gly	Pro	Thr	Asp	Pro	Glu	Glu	Ala	Ala
	115					120						125			
Thr	Leu	Val	Arg	Glu	Pro	Arg	Arg								
	130					135									

<210> 2187
 <211> 342
 <212> DNA
 <213> Homo sapiens

<400> 2187
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 cccgccatat gctgcaaccg caacaccgct ttgccgtcgc atggcatctc cactccggat
 120
 cgcattcgatc caccgagggct atcggcgcga aagaagttgc cggggcaaaa tcccggcgag
 180
 gaaagcccgga tggagtggaa gacgctgctc aacgacaccc gcttcggagg ggctgccagc
 240
 ctcatgagga cgcgcggacg gtcggagttc cagaaggacc acgaccggat catcttctcc
 300
 gaagccttcc gcaagctggg ccgcaagacc caggtgcacc cg
 342

<210> 2188
 <211> 51
 <212> PRT
 <213> Homo sapiens

Met	Glu	Trp	Lys	Thr	Leu	Leu	Asn	Asp	Thr	Arg	Phe	Gly	Gly	Val	Ala
1			5						10					15	
Ser	Leu	Asp	Gly	Thr	Arg	Gly	Arg	Ser	Glu	Phe	Gln	Lys	Asp	His	Asp
		20					25					30			
Arg	Ile	Ile	Phe	Ser	Glu	Ala	Phe	Arg	Lys	Leu	Gly	Arg	Lys	Thr	Gln
	35					40					45				
Val	His	Pro													
	50														

<210> 2189
 <211> 1412
 <212> DNA
 <213> Homo sapiens

<400> 2189
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 120
 ggttcctctc ggacgctcac gacgacgaag ctttcgaggt tttccgcgcc gcctgcccga
 180
 gggtgcccga ggaggctgcc caggtgatca gtgcctgaca ccgggctgac ttgcaggtc
 240

atcgaggcaa tctgtgcctg gttcgacgcc aacggacgcg atctgccgtg gcgccgaccc
 300
 ggcacctccg cgtggggcgt gcttgtagc gaggtcatga gccaacagac cccgatgtcc
 360
 cgggtgatcg ggccgtggca cgagtggatg aaccgctggc ccaccctga tgatttggcg
 420
 gaggaggact ctggggaagc ggttgccgcg tggggcgcc tgggttacc gcgtcgggccc
 480
 ttacgcctgc attcctgtgc cgtcacgac gccaccgagc acgacggggg tgtgcccac
 540
 agtgacgacg agctcgtcgc cctcccgggt attggcgact acaccgagc cgagtcgtc
 600
 tcttttgcgt ttggcgggcg cgccacagt cttgacacca atgtacgtc cctcatcgct
 660
 agagcagagt ctgggatcgc aaactgtcca acctcgggtga cgagggtga gcgggtagtc
 720
 gccgacgctg tggttcccga cgaagacgtc cgagcggcca agtggcggtt ggcgctgatg
 780
 gaattggggg cactggtatg cacggcgcg tctccgcagt gtgaggtctg cccgatccgg
 840
 gatggctgca ggtgggtgat cgacggtagg cgggacaatg ccccgggccg tcgaggacag
 900
 ccatggaagg gcacggatcg ccagtccgc ggcgtgatta tggacgtggt gcgcaacagc
 960
 cctcacgggg tgaagggtcca gatggctctt tccgcctggc ccgagctcga tcaggcatca
 1020
 aggtgcctgg aatccttact cgatgacggt ttagtgcacc gacgaggtaa ccttattagc
 1080
 ctgtgacctg agaaattctt ggccccgacc acccaaacag accgagtcca gcagtgatgc
 1140
 cgctgggtta tccttagagg cggctcctca attggatcag ccaaaccacg tcaccgatca
 1200
 agacaccatg agcacaacac ccaaacagcc gcgcacggcg acagctgccc gacgccgaca
 1260
 cattgtcgac catctgcgtt ctttggggca ctcgagatcc atcgagatc tttaccaact
 1320
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 1380
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 1412

<210> 2190

<211> 292

<212> PRT

<213> Homo sapiens

<400> 2190

Ser	Val	Pro	Asp	Thr	Gly	Leu	Thr	Ser	Gln	Val	Ile	Glu	Ala	Ile	Cys
1				5				10						15	
Ala	Trp	Phe	Asp	Ala	Asn	Gly	Arg	Asp	Leu	Pro	Trp	Arg	Arg	Pro	Gly
			20					25						30	
Thr	Ser	Ala	Trp	Gly	Val	Leu	Val	Ser	Glu	Val	Met	Ser	Gln	Gln	Thr
		35					40					45			
Pro	Met	Ser	Arg	Val	Ile	Gly	Pro	Trp	His	Glu	Trp	Met	Asn	Arg	Trp

50 55 60
 Pro Thr Pro Asp Asp Leu Ala Glu Glu Asp Ser Gly Glu Ala Val Ala
 65 70 75 80
 Ala Trp Gly Arg Leu Gly Tyr Pro Arg Arg Ala Leu Arg Leu His Ser
 85 90 95
 Cys Ala Val Thr Ile Ala Thr Glu His Asp Gly Gly Val Pro Asn Ser
 100 105 110
 Asp Asp Glu Leu Val Ala Leu Pro Gly Ile Gly Asp Tyr Thr Ala Ser
 115 120 125
 Ala Val Val Ser Phe Ala Phe Gly Gly Arg Ala Thr Val Leu Asp Thr
 130 135 140
 Asn Val Arg Arg Leu Ile Ala Arg Ala Glu Ser Gly Ile Ala Asn Cys
 145 150 155 160
 Pro Thr Ser Val Thr Arg Ala Glu Arg Val Val Ala Asp Ala Leu Val
 165 170 175
 Pro Asp Glu Asp Val Arg Ala Ala Lys Trp Ala Val Ala Ser Met Glu
 180 185 190
 Leu Gly Ala Leu Val Cys Thr Ala Arg Ser Pro Gln Cys Glu Val Cys
 195 200 205
 Pro Ile Arg Asp Gly Cys Arg Trp Val Ile Asp Gly Arg Pro Asp Asn
 210 215 220
 Ala Pro Ala Arg Arg Gly Gln Pro Trp Lys Gly Thr Asp Arg Gln Cys
 225 230 235 240
 Arg Gly Val Ile Met Asp Val Val Arg Asn Ser Pro His Gly Val Lys
 245 250 255
 Val Gln Met Ala Leu Ser Ala Trp Pro Glu Leu Asp Gln Ala Ser Arg
 260 265 270
 Cys Leu Glu Ser Leu Leu Asp Asp Gly Leu Val His Arg Arg Gly Asn
 275 280 285
 Leu Ile Ser Leu
 290

<210> 2191

<211> 502

<212> DNA

<213> Homo sapiens

<400> 2191

nnacgcgtcg agaattctcta ctctgcccgc aacaacgtcc ggcttcgtca ggctcacgat
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 gactcccttg acgacgacac catttccggg ggtagccac attggtgctg cctcatggac
 120
 tacattgaat cccgttcaat cctgaacggc gttcaggacg tctccagtct cggaaggacc
 180
 agagtattgc tgaattctagc cgacatgacc gaacgcggcc tgagggggga gtccattacc
 240
 cgcgaggagg ccttcgagat tcttcgcagc agtgatgatg agctcatgtc aatcatcgcc
 300
 gccgccggaa aagtgcgtcg ccactttttc gataaccggg ttgcctcaa ctacctggtc
 360
 aacctcaagt ccggcctgtg tcccgaagac tgctcctatt gctcgcagcg tctgggatcg
 420
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 480

gctgggattg ccggtggtgc ac
502

<210> 2192
<211> 104
<212> PRT
<213> Homo sapiens

<400> 2192
Leu Asn Leu Ala Asp Met Thr Glu Arg Gly Leu Arg Gly Glu Ser Ile
1 5 10 15
Thr Arg Glu Glu Ala Leu Glu Ile Leu Arg Ser Ser Asp Asp Glu Leu
20 25 30
Met Ser Ile Ile Ala Ala Ala Gly Lys Val Arg Arg His Phe Phe Asp
35 40 45
Asn Arg Val Arg Leu Asn Tyr Leu Val Asn Leu Lys Ser Gly Leu Cys
50 55 60
Pro Glu Asp Cys Ser Tyr Cys Ser Gln Arg Leu Gly Ser Arg Ala Glu
65 70 75 80
Ile Thr Lys Tyr Ser Trp Ala Asp Pro Gln Lys Val His Asp Ala Val
85 90 95
Glu Ala Gly Ile Ala Gly Gly Ala
100

<210> 2193
<211> 321
<212> DNA
<213> Homo sapiens

<400> 2193
ccatggggaa tgcagagcac ggacagtcac acagactgtc ctctctggcc ttctggaccc
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aacatactcc tcttgccaac tgggtattac tggaccttac tgggccttac tggacccaac
120
atactcctct tgccaactgg ggatttaaaa attttaaaag cccctttatc tccctccaca
180
agtcattgtac tgccaacagg gacacactgt tttctttgga aaccctgctg tgtgcccaga
240
cagaggtccc actgccttgg gacagctccc ttgcctanag gggaaggagg gtgtgtgtgc
300
tgtgtgtgtt taggttgggg a
321

<210> 2194
<211> 106
<212> PRT
<213> Homo sapiens

<400> 2194
Met Gly Asn Ala Glu His Gly Gln Ser His Arg Leu Ser Ser Leu Ala
1 5 10 15
Phe Trp Thr Gln His Thr Pro Leu Ala Asn Trp Val Leu Leu Asp Leu
20 25 30
Thr Gly Pro Tyr Trp Thr Gln His Thr Pro Leu Ala Asn Trp Gly Phe

```

      35              40              45
Lys Asn Phe Lys Ser Pro Phe Ile Ser Leu His Lys Ser Cys Thr Ala
      50              55              60
Asn Arg Asp Thr Leu Phe Ser Leu Glu Thr Leu Leu Cys Ala Gln Thr
65              70              75              80
Glu Val Pro Leu Pro Trp Asp Ser Ser Leu Ala Xaa Arg Gly Arg Arg
      85              90              95
Val Cys Val Leu Cys Val Phe Arg Leu Gly
      100              105

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<210> 2195

<211> 504

<212> DNA

<213> Homo sapiens

<400> 2195

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naccggtctc cctacatcaa tgcccaccgc gattgcacct ttgttgcac gtcacctggc
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gacggtgtgg cacaccccaa ctttggaat atcgccacg acctggtgct gttgcacagc
120
ctgggtgtgc gtctggtact ggtccacggt tcgcgcccgc agatcgacag ccgccttgag
180
gcacgaggcc tgggtgccgta ttaccacaag ggcattgcgtg tcaccgatgc atcaacgctc
240
gaatgcgtga tcgatgctgt cgggcaactg cgcattgcga ttgaagcgcg cttgtcgatg
300
gacatggcgt cttcgccaat gcagggttcg cgtctgcgcg tagccagcgg caacctggtc
360
actgcggcgc cgatcggcgt gtcgacggt gtggattttc accataccgg cgaagtgcgc
420
cgggtggacc gcaagggcat caaccgcctg ctcgatgagc gtcgattgt gctgctgtcg
480
cccttgggtt actcgccac cggt
504

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<210> 2196

<211> 168

<212> PRT

<213> Homo sapiens

<400> 2196

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Xaa Ala Ser Pro Tyr Ile Asn Ala His Arg Asp Cys Thr Phe Val Val
1              5              10              15
Met Leu Pro Gly Asp Gly Val Ala His Pro Asn Phe Gly Asn Ile Val
      20              25              30
His Asp Leu Val Leu Leu His Ser Leu Gly Val Arg Leu Val Leu Val
      35              40              45
His Gly Ser Arg Pro Gln Ile Asp Ser Arg Leu Glu Ala Arg Gly Leu
      50              55              60
Val Pro Tyr Tyr His Lys Gly Met Arg Val Thr Asp Ala Ser Thr Leu
65              70              75              80
Glu Cys Val Ile Asp Ala Val Gly Gln Leu Arg Ile Ala Ile Glu Ala
      85              90              95
Arg Leu Ser Met Asp Met Ala Ser Ser Pro Met Gln Gly Ser Arg Leu

```

```

          100          105          110
Arg Val Ala Ser Gly Asn Leu Val Thr Ala Arg Pro Ile Gly Val Leu
          115          120          125
Asp Gly Val Asp Phe His His Thr Gly Glu Val Arg Arg Val Asp Arg
          130          135          140
Lys Gly Ile Asn Arg Leu Leu Asp Glu Arg Ser Ile Val Leu Leu Ser
145          150          155          160
Pro Leu Gly Tyr Ser Pro Thr Gly
          165

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<210> 2197

<211> 351

<212> DNA

<213> Homo sapiens

<400> 2197

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acaagtccgt cgacgattcg ctttccggag gcgggcccag gaatggtaat gaaacccgag
60
ttatggggcc ctgcgctcga cgagattgcc gcgggaaaac gtgccggagg ggctgaacag
120
ttagattccg cagtgcagca catccacggt gctactcacg ataaactgtc cgggtgctgtt
180
ccgaaacgct acgatggtcg ggatgtcttg gcaggcgagg acccgaatgc accgttgctg
240
cttgtgccta gcccggtcgg tgcagtgttt agtcaaaata aggcacaagc ctggtccaat
300
gaagaccaca ttgtttttgc ctgtgggcgc tatgaaggta ttgatcaacg c
351

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<210> 2198

<211> 117

<212> PRT

<213> Homo sapiens

<400> 2198

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Thr Ser Pro Ser Thr Ile Arg Phe Pro Glu Ala Gly Pro Gly Met Val
1          5          10          15
Met Lys Pro Glu Leu Trp Gly Pro Ala Leu Asp Glu Ile Ala Ala Gly
20          25          30
Lys Arg Ala Gly Gly Ala Glu Gln Leu Asp Ser Ala Val Gln His Ile
35          40          45
His Gly Ala Thr His Asp Lys Leu Ser Gly Ala Val Pro Lys Arg Tyr
50          55          60
Asp Gly Arg Asp Val Leu Ala Gly Glu Asp Pro Asn Ala Pro Leu Leu
65          70          75          80
Leu Val Pro Ser Pro Ala Gly Ala Val Phe Ser Gln Asn Lys Ala Gln
85          90          95
Ala Trp Ser Asn Glu Asp His Ile Val Phe Ala Cys Gly Arg Tyr Glu
100          105          110
Gly Ile Asp Gln Arg
115

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<210> 2199

<211> 457

<212> DNA

<213> Homo sapiens

<400> 2199

agacgccggc cgccaagatc tgcattcccta ggccacgcta agaccctggg gaagagcgca
 60
 ggagccccggg agaagggtg gaaggagggg actggacgtg cggagaattc cccctaaaa
 120
 ggcagaagcc cccgccccca cctccgagc tccgttcggg cagagcgctt gcctgcctgc
 180
 cggtgctggg ggcgcccacc tcgcccagcc atgccaggcc cggccaccga cgcggggaag
 240
 atccctttct gcgacgcca ggaagaaatc cgtgccgggc tcgaaagctc tgaggcgggc
 300
 ggcggccccg agaggccagg cgcgcgcggg cagcggcaga acatcgtctg gaggaatgtc
 360
 gtctgatga gcttgctcca cttggggggc gtgtactccc tgggtgctcat ccccaaagcc
 420
 aagccactca ctctgctctg gggtaagtcc cgccggc
 457

<210> 2200

<211> 152

<212> PRT

<213> Homo sapiens

<400> 2200

Arg	Arg	Arg	Pro	Pro	Arg	Ser	Ala	Ser	Leu	Gly	His	Ala	Lys	Thr	Leu
1				5					10					15	
Gly	Lys	Ser	Ala	Gly	Ala	Arg	Glu	Lys	Gly	Trp	Lys	Glu	Gly	Thr	Gly
			20					25					30		
Arg	Ala	Glu	Asn	Ser	Pro	Leu	Lys	Gly	Arg	Ser	Pro	Arg	Pro	His	Pro
			35				40					45			
Pro	Ser	Ser	Val	Arg	Ala	Glu	Arg	Leu	Pro	Ala	Cys	Arg	Cys	Trp	Gly
			50			55					60				
Arg	Pro	Pro	Arg	Pro	Ala	Met	Pro	Gly	Pro	Ala	Thr	Asp	Ala	Gly	Lys
65					70				75					80	
Ile	Pro	Phe	Cys	Asp	Ala	Lys	Glu	Glu	Ile	Arg	Ala	Gly	Leu	Glu	Ser
			85					90					95		
Ser	Glu	Gly	Gly	Gly	Gly	Pro	Glu	Arg	Pro	Gly	Ala	Arg	Gly	Gln	Arg
			100				105						110		
Gln	Asn	Ile	Val	Trp	Arg	Asn	Val	Val	Leu	Met	Ser	Leu	Leu	His	Leu
			115				120					125			
Gly	Ala	Val	Tyr	Ser	Leu	Val	Leu	Ile	Pro	Lys	Ala	Lys	Pro	Leu	Thr
			130				135					140			
Leu	Leu	Trp	Gly	Lys	Ser	Arg	Arg								
145						150									

<210> 2201

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2201

agtactgcga tggacagcta tgcgtggat ggtggcgca aattacatgt ttgtggtaac
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 aaccttgatt gcgatggta tgaagtcgaa gaaggcgaat tcaagatcaa gggttatgat
 120
 ggtccgacta tcccatgcga taaatgtgat ggtgagatgc agcttaaaac gggtcgtttt
 180
 ggtccatatt tcgcatgtac tagctgtgac aatactcgta aggtactcaa gagggtcaa
 240
 cctgctccgc cacgtgtaga cccaatcaaa atggagcatc tacgttcaac gaagcatgat
 300
 gatttcttcg tcttacgtga gggcgctgct ggttta
 336

<210> 2202

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2202

Ser	Thr	Ala	Met	Asp	Ser	Tyr	Val	Val	Asp	Gly	Gly	Arg	Lys	Leu	His
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Val	Cys	Gly	Asn	Asn	Pro	Asp	Cys	Asp	Gly	Tyr	Glu	Val	Glu	Glu	Gly
		20						25					30		
Glu	Phe	Lys	Ile	Lys	Gly	Tyr	Asp	Gly	Pro	Thr	Ile	Pro	Cys	Asp	Lys
		35				40					45				
Cys	Asp	Gly	Glu	Met	Gln	Leu	Lys	Thr	Gly	Arg	Phe	Gly	Pro	Tyr	Phe
	50				55					60					
Ala	Cys	Thr	Ser	Cys	Asp	Asn	Thr	Arg	Lys	Val	Leu	Lys	Ser	Gly	Gln
65					70				75				80		
Pro	Ala	Pro	Pro	Arg	Val	Asp	Pro	Ile	Lys	Met	Glu	His	Leu	Arg	Ser
				85				90					95		
Thr	Lys	His	Asp	Asp	Phe	Phe	Val	Leu	Arg	Glu	Gly	Ala	Ala	Gly	Leu
			100					105					110		

<210> 2203

<211> 273

<212> DNA

<213> Homo sapiens

<400> 2203

ctcgagagat gcagtcccag ccgggggtggg aagctgtgca gacagccccg gatctgggac
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 gtgatggaaa actcaacaga ctggttcaga tcttggcccg gagcccagag gcaccgggga
 120
 cccccagggc tgtttctccc tggccacacc agtaccacac ttccaaatgc cctgtaggtg
 180
 accaccaggc cacacaggcc cgtctgaggg gccacaggct gtgcaccatg ggacgcaggc
 240
 ctgtccctgc ctccctccga tgcctgatg gtg
 273

<210> 2204

<211> 88

<212> PRT

<213> Homo sapiens

<400> 2204

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Met Gln Ser Gln Pro Gly Trp Glu Ala Val Gln Thr Ala Pro Asp Leu
 1             5             10             15
Gly Arg Asp Gly Lys Leu Asn Arg Leu Val Gln Ile Leu Ala Arg Ser
          20             25             30
Pro Glu Ala Pro Gly Thr Pro Arg Ala Val Ser Pro Trp Pro His Gln
          35             40             45
Tyr Pro Thr Ser Lys Cys Pro Val Gly Asp His Gln Ala Thr Gln Ala
          50             55             60
Arg Leu Arg Gly His Arg Leu Cys Thr Met Gly Arg Arg Pro Val Pro
65             70             75             80
Ala Ser Leu Arg Cys Pro Asp Gly
          85

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<210> 2205

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2205

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gnnnnngng nnnnactggt gtgcatgggt aaaatcctgc aagctactgg gttgccacag
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catctgtccc actttgtggt ctgcaaatac agcttctggg atcaacagga gccggtgatt
120
gtcgtcctcg aagtggacac ctctcctct tccgtcagca aggagccgca ctgcatgggt
180
gtctttgatc attgcaatga gttttctggt aacatcacgc aagactttat cgagcatctt
240
tccgaaggag cattggcaat tgaagtatat ggacataaaa taaacgatcc ccggaaaaac
300
cccgccctgt gggatttggg aatcatccaa gcaaagacac gtagtcttcg ggacagatgg
360
agtgaagtgc ccaggaaatt ggaattc
387

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<210> 2206

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2206

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Xaa Xaa Gly Xaa Xaa Leu Val Cys Met Val Lys Ile Leu Gln Ala Thr
 1             5             10             15
Gly Leu Pro Gln His Leu Ser His Phe Val Phe Cys Lys Tyr Ser Phe
          20             25             30
Trp Asp Gln Gln Glu Pro Val Ile Val Ala Pro Glu Val Asp Thr Ser
          35             40             45
Ser Ser Ser Val Ser Lys Glu Pro His Cys Met Val Val Phe Asp His
          50             55             60
Cys Asn Glu Phe Ser Val Asn Ile Thr Glu Asp Phe Ile Glu His Leu
65             70             75             80
Ser Glu Gly Ala Leu Ala Ile Glu Val Tyr Gly His Lys Ile Asn Asp

```


	85		90		95										
Pro	Arg	Lys	Asn	Pro	Ala	Leu	Trp	Asp	Leu	Gly	Ile	Ile	Gln	Ala	Lys
		100					105						110		
Thr	Arg	Ser	Leu	Arg	Asp	Arg	Trp	Ser	Glu	Val	Pro	Arg	Lys	Leu	Glu
		115					120						125		
Phe															

<210> 2207
 <211> 667
 <212> DNA
 <213> Homo sapiens

<400> 2207
 atctccaacc ccgagaccct ctccaataca gccggcttcg agggctacat cgacctgggc
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 cgcgagctct ccagcctgca ctactgctc tgggaggccg tcagccagct ggagcagagc
 120
 atagtatcca aactgggacc cctgcctcgg atcctgaggg acgtccacac agcactgagc
 180
 accccaggta gcgggcagct cccagggacc aatgacctgg cctccacacc gggctctggc
 240
 agcagcagca tctcagctgg gctgcagaag atggtgattg agaacgatct ttccggtctg
 300
 atagatttca cccggttacc gtctccaacc cccgaaaaca aggacttggt tttgtcaca
 360
 aggtcctccg gggccagcc ctacactgcc cgcagctcga gttactcgga agccaacgag
 420
 cctgatcttc agatggccaa cgggtggcaag agcctctcca tgggtggacct ccaggacgcc
 480
 cgcacgctgg atggggaggc aggtctcccc gcggggcccc acgtcctccc cacagatggg
 540
 caggccgctg cagctcagct ggtggccggg tggccggccc gggcaacccc agtgaacctg
 600
 gcagggctgg ccacggtgcg gcgggcaggc cagacaccaa ccacaccagg cacctccgag
 660
 ggcgcg
 667

<210> 2208
 <211> 222
 <212> PRT
 <213> Homo sapiens

<400> 2208
 Ile Ser Asn Pro Glu Thr Leu Ser Asn Thr Ala Gly Phe Glu Gly Tyr
 1 5 10 15
 Ile Asp Leu Gly Arg Glu Leu Ser Ser Leu His Ser Leu Leu Trp Glu
 20 25 30
 Ala Val Ser Gln Leu Glu Gln Ser Ile Val Ser Lys Leu Gly Pro Leu
 35 40 45
 Pro Arg Ile Leu Arg Asp Val His Thr Ala Leu Ser Thr Pro Gly Ser
 50 55 60
 Gly Gln Leu Pro Gly Thr Asn Asp Leu Ala Ser Thr Pro Gly Ser Gly

```

65          70          75          80
Ser Ser Ser Ile Ser Ala Gly Leu Gln Lys Met Val Ile Glu Asn Asp
          85          90          95
Leu Ser Gly Leu Ile Asp Phe Thr Arg Leu Pro Ser Pro Thr Pro Glu
          100          105          110
Asn Lys Asp Leu Phe Phe Val Thr Arg Ser Ser Gly Val Gln Pro Ser
          115          120          125
Pro Ala Arg Ser Ser Ser Tyr Ser Glu Ala Asn Glu Pro Asp Leu Gln
          130          135          140
Met Ala Asn Gly Gly Lys Ser Leu Ser Met Val Asp Leu Gln Asp Ala
145          150          155          160
Arg Thr Leu Asp Gly Glu Ala Gly Ser Pro Ala Gly Pro Asp Val Leu
          165          170          175
Pro Thr Asp Gly Gln Ala Ala Ala Ala Gln Leu Val Ala Gly Trp Pro
          180          185          190
Ala Arg Ala Thr Pro Val Asn Leu Ala Gly Leu Ala Thr Val Arg Arg
          195          200          205
Ala Gly Gln Thr Pro Thr Thr Pro Gly Thr Ser Glu Gly Ala
          210          215          220

```

<210> 2209

<211> 353

<212> DNA

<213> Homo sapiens

<400> 2209

```

ngggaagttg gtactagcct cccaaagcca ctctcctgag tgacattgag agcatcctat
60
agagaaggcc atgagagaga tagcactggg acagatggtg tcagcagagg ggactccaga
120
ccacagcaga agtgaccaag ctgtagcttc cttagatggc cccaagggtg ggaggcttca
180
cacagcagag cctgggtctg gaggcacctt ggggatgttt ttccccatta ggcccctgag
240
ctctatggaa gcacttaact gcctgttccc cgcttattct gtgtttaaac caaggaaaca
300
acatgcctgg ggtctgaaat cctggattca aatcctgact gtgttggtgtg ctt
353

```

<210> 2210

<211> 94

<212> PRT

<213> Homo sapiens

<400> 2210

```

Met Arg Glu Ile Ala Leu Gly Gln Met Val Ser Ala Glu Gly Thr Pro
1          5          10          15
Asp His Ser Arg Ser Asp Gln Ala Val Ala Ser Leu Asp Gly Pro Lys
          20          25          30
Gly Gly Arg Leu His Thr Ala Glu Pro Gly Ser Gly Gly Thr Leu Gly
          35          40          45
Met Phe Phe Pro Ile Arg Pro Leu Ser Ser Met Glu Ala Leu Asn Cys
          50          55          60
Leu Phe Pro Ala Tyr Ser Val Phe Lys Pro Arg Lys Gln His Ala Trp

```

65 70 75
Gly Leu Lys Ser Trp Ile Gln Ile Leu Thr Val Leu Cys Ala
85 90

```
<210> 2211
<211> 493
<212> DNA
<213> Homo sapiens
```

```

<400> 2211
ctgaccacat ctcgcacgat cctagacctc tgttctgcat ctccgacacc accgactgct
60
cactgtaccc tgggactgca cagagggaaa cgattaccaa acccagagac ggggaccggg
120
aggaaggagg ggaaggggat ggatccatgt actttggggg tggagaaatg ggggacagca
180
agtctcctca acccaaatac agcccccttg ggaggctcct gccccgtctc tgtggatagt
240
gagcccagct gcaagggcgg cctgccaggg acaaaccac caaaaggaaa gatgttgtag
300
aaccaaagag aggctccctg aaagaggcgt ctcccggggc ctccaagccc gggagcgccc
360
ggcggacagg gggcagtggc caagtctgtg cggaccctga ccgcctcaga gaacgagagc
420
atgcgcaaag tcatgcccac caccaagtcc agcagaggcg ccggctggag gcgaccagag
480
ctgtcatccc ggg
493

```

```
<210> 2212
<211> 126
<212> PRT
<213> Homo sapiens
```

```

<400> 2212
Met Gly Met Thr Leu Arg Met Leu Ser Phe Ser Glu Ala Val Arg Val
 1          5          10          15
Arg Thr Asp Leu Ala Thr Ala Pro Cys Pro Pro Gly Ala Pro Gly Leu
          20          25          30
Gly Gly Pro Gly Arg Arg Leu Phe Gln Gly Ala Ser Leu Trp Phe Tyr
          35          40          45
Asn Ile Phe Pro Phe Gly Gly Phe Val Pro Gly Arg Pro Pro Leu Gln
          50          55          60
Leu Gly Ser Leu Ser Thr Glu Thr Gly Gln Glu Pro Pro Arg Gly Ala
65          70          75          80
Val Phe Gly Leu Arg Arg Leu Ala Val Pro His Phe Ser Asn Pro Lys
          85          90          95
Val His Gly Ser Ile Pro Phe Pro Ser Phe Leu Pro Val Pro Val Ser
          100          105          110
Gly Phe Gly Asn Arg Phe Pro Leu Cys Ser Pro Arg Val Gln
          115          120          125

```

$$\begin{array}{ll} \langle 210 \rangle & 2213 \\ \langle 211 \rangle & 327 \end{array}$$

<212> DNA

<213> Homo sapiens

<400> 2213

acgcgtccga ccggcagttc cggcagctgc gggaaagctg cgatgcgctc gccgagcatt
 60
 gccggtgctt cgacacactg gggtatatcg ccctcaaagc acaggtctac gaaggttctg
 120
 acggaaggcc cggccaatcc gatcgcgggc tcggcgctgc gcatcatccg ggcgcgctg
 180
 tcgcagctct ggggcacgtc gctgctccgc aacggacggg cggaacagag tgtggtggag
 240
 atgccccggt tggtegacgc gatcacgtca cgggacgagg aagccgcca gcgtgcactg
 300
 ctcgaccaca atcgagcgc gttggaa
 327

<210> 2214

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2214

Met Arg Ser Pro Ser Ile Ala Gly Ala Ser Thr His Trp Val Ile Ser
 1 5 10 15
 Pro Ser Lys His Arg Ser Thr Lys Val Leu Thr Glu Gly Pro Ala Asn
 20 25 30
 Pro Ile Ala Ala Ser Ala Leu Arg Ile Ile Arg Ala Arg Val Ser Gln
 35 40 45
 Leu Trp Gly Thr Ser Leu Leu Arg Asn Gly Arg Ala Glu Gln Ser Val
 50 55 60
 Val Glu Ile Ala Arg Leu Val Asp Ala Ile Thr Ser Arg Asp Glu Glu
 65 70 75 80
 Ala Ala Gln Arg Ala Leu Leu Asp His Asn Arg Ser Ala Leu Glu
 85 90 95

<210> 2215

<211> 430

<212> DNA

<213> Homo sapiens

<400> 2215

ctggggatca tgccctacat cactgcgtcg atcatcctgc agctgctgac agtcgtgac
 60
 ccgaagctgg aaacccttaa gaaggaggc gcgtccggtc agaacaagat caccagtagc
 120
 acccggtacc tcaactctcg gcttggcctg ttgcaggcaa cggccttcgt cagcgttgcc
 180
 acctccggcc gtctattcac cnntgcagct ntgccagtcg tctactccac ctcggtcttc
 240
 gaagtcgtcg tcatgatcct gactatgacg gccggtacga ccatcgatcat gtggatgggt
 300
 gagctcatca ccgaccgcgg tatcggaac ggtatgtcga tcatgatttt cactcagatt
 360

gcggcgcggtt tccctgactc gctgtggtct atcaaggctg ctcgaaatgg cgccgggtcag
 420
 gctcacgcgt
 430

<210> 2216
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2216
 Leu Gly Ile Met Pro Tyr Ile Thr Ala Ser Ile Ile Leu Gln Leu Leu
 1 5 10 15
 Thr Val Val Ile Pro Lys Leu Glu Thr Leu Lys Lys Glu Gly Ala Ser
 20 25 30
 Gly Gln Asn Lys Ile Thr Gln Tyr Thr Arg Tyr Leu Thr Leu Val Leu
 35 40 45
 Gly Leu Leu Gln Ala Thr Ala Phe Val Thr Leu Ala Thr Ser Gly Arg
 50 55 60
 Leu Phe Thr Xaa Ala Ala Xaa Pro Val Val Tyr Ser Thr Ser Val Phe
 65 70 75 80
 Glu Val Val Val Met Ile Leu Thr Met Thr Ala Gly Thr Thr Ile Val
 85 90 95
 Met Trp Met Gly Glu Leu Ile Thr Asp Arg Gly Ile Gly Asn Gly Met
 100 105 110
 Ser Ile Met Ile Phe Thr Gln Ile Ala Ala Arg Phe Pro Asp Ser Leu
 115 120 125
 Trp Ser Ile Lys Val Ala Arg Asn Gly Ala Gly Gln Ala His Ala
 130 135 140

<210> 2217
 <211> 444
 <212> DNA
 <213> Homo sapiens

<400> 2217
 accagggccg cttcgaagga cctctctcca gctatcgtga cgacgacggc gaagcgggct
 60
 atgacgtggc tcgatgacga cgtgggccc gacctgttga atcaggctga ttccatggac
 120
 catgccctgg agggcaccgt cccaggtcgg gtcaccacgc cggacgccca agtcatccag
 180
 acctgtgccg tggtgcgtga ccttgctcgc gtggcagtca gccagctggg ccgaaatgac
 240
 gaggactcta gggaaccagt cgatgcggag agagtacagg ctcaagcgnc gatgcgggag
 300
 gttttcgaga ccgccgaacg catggtgggg ctggccgccg ccgacgtggg gtgggtctct
 360
 gagtctgaga agggataccg cagcattcac gtcgtccgc tgagtgttgg cggcttgcta
 420
 cgagagaatg tctttgctca gtcc
 444

<210> 2218

<211> 148
 <212> PRT
 <213> Homo sapiens

<400> 2218

```

Thr Arg Ala Ala Ser Lys Asp Leu Ser Pro Ala Ile Val Thr Thr Thr
 1           5           10           15
Ala Lys Arg Ala Met Thr Trp Leu Asp Asp Asp Val Gly Ala Asp Leu
          20           25           30
Leu Asn Gln Ala Asp Ser Met Asp His Ala Leu Glu Ala Thr Val Pro
          35           40           45
Gly Arg Val Thr Thr Pro Asp Ala Gln Val Ile Gln Thr Cys Ala Val
          50           55           60
Leu Arg Asp Leu Ala Arg Val Ala Val Ser Gln Leu Gly Arg Asn Asp
65           70           75           80
Glu Asp Ser Arg Glu Pro Val Asp Ala Glu Arg Val Gln Ala Gln Ala
          85           90           95
Xaa Met Arg Glu Val Phe Glu Thr Ala Glu Arg Met Val Gly Leu Ala
          100          105          110
Ala Ala Asp Val Val Trp Val Ser Glu Ser Glu Lys Gly Tyr Arg Ser
          115          120          125
Ile His Val Ala Pro Leu Ser Val Gly Gly Leu Leu Arg Glu Asn Val
          130          135          140
Phe Ala Gln Ser
145

```

<210> 2219
 <211> 688
 <212> DNA
 <213> Homo sapiens

<400> 2219

```

acgcgtaccg tcgttggcat gacgctcctg ccaactggaaa tttggctgtc attcagctac
60
ggcattaccga atatggcgtg gatgtggcta tggttcgacg agcccggaag ccggtgggag
120
tggtcgatec ttttccccgc tgggtggctg accagcgctt tggtcagtca ggggttcggt
180
ggaatgttcc atagtgtgca gattgcgcgt catgtcagca gttaccacgg catcatggtc
240
gctttcgcgc tcgttgggta cggatggctt gcgatgcaca acttgcgtca ccctgatgag
300
cgctattcga ttcgctcggc cttgataatc ggcacgagca tccagttcac ctgggaggca
360
gtgctgatga tctcgggtat caggccggtg acatggcgcc cgcttggtat cgattctctc
420
atcgagacga atctcggcgc tccgttcattg ttgctcattg tgaaagcttg gcgcgcgcca
480
cccgaaggaa ttcttggctc taccagtccg cgcccgaccg cccgtggcac agcgcgagtc
540
tatatgaggg atgatcttgt ttctcgacgc cttctacagc gtccttgaga gcctctgcga
600
gcgaaggggc cggtgttagg tctccccggg gtcggtgtg gtcctctctc tgcgtgacgc
660

```

agagccgtgt gatgaggcga agtcatga
688

<210> 2220
<211> 189
<212> PRT
<213> Homo sapiens

<400> 2220
Met Ser Val Leu Pro Leu Glu Ile Trp Leu Ser Phe Ser Tyr Gly Ile
1 5 10 15
Thr Asn Met Ala Trp Met Trp Leu Trp Phe Asp Glu Pro Gly Asn Arg
20 25 30
Trp Glu Trp Ser Ile Leu Phe Pro Ala Gly Trp Leu Thr Ser Ala Leu
35 40 45
Val Ser Gln Gly Phe Gly Gly Met Phe His Ser Val Gln Ile Ala Arg
50 55 60
His Val Ser Ser Tyr His Gly Ile Met Val Ala Phe Ala Leu Val Gly
65 70 75 80
Tyr Gly Trp Leu Ala Met His Asn Leu Arg His Pro Asp Glu Arg Tyr
85 90 95
Ser Ile Arg Ser Ala Leu Ile Ile Gly Ile Gly Ile Gln Phe Thr Trp
100 105 110
Glu Ala Val Leu Met Ile Ser Gly Ile Arg Pro Leu Thr Trp Arg Pro
115 120 125
Leu Val Ile Asp Ser Leu Ile Glu Thr Asn Leu Gly Ala Pro Phe Met
130 135 140
Leu Leu Ile Val Lys Ala Trp Arg Ala Pro Pro Glu Gly Ile Pro Gly
145 150 155 160
Ser Thr Ser Pro Arg Pro Thr Ala Arg Gly Thr Ala Arg Val Tyr Met
165 170 175
Arg Asp Asp Leu Val Ser Arg Arg Leu Leu Gln Arg Pro
180 185

<210> 2221
<211> 530
<212> DNA
<213> Homo sapiens

<400> 2221
actagtgtag ctgcaatata tactcgggat ttactacagt taagccttat ccttccaccc
60
aaagaagagc aaaccgccat cgctaacgct ctttccgaca tggacaccga actcgacgcc
120
ctacaacaac gcctcagtaa aacaaaaacc atcaagcaag gcatgatgca agaactactc
180
acagggaaaa cgagggttgt atgagccaca aggtgaattt agtgcattgag ctggataaagc
240
gtattatctc ggtaaatagc ttattgtcac agcctgagct tgctattccg gcttatcagc
300
ggccttataa atggtcacaa gagaacctaa atgcgctgat gaggattta cgaatttatc
360
gtaacaaatc ggcttatcgg ctggggacgg tggtttttca ttatcataat gaaccgtag
420

acaacgagaa tacccacaag ctggatattg tagacgggtca gcaacgtacc ttaaccttgt
 480
 tgctgctagt caaagccatt ttagaagaac ggttgtctgc gttaacgcgt
 530

<210> 2222
 <211> 67
 <212> PRT
 <213> Homo sapiens

<400> 2222
 Thr Ser Val Ala Ala Ile Tyr Thr Arg Asp Leu Leu Gln Leu Ser Leu
 1 5 10 15
 Ile Leu Pro Pro Lys Glu Glu Gln Thr Ala Ile Ala Asn Val Leu Ser
 20 25 30
 Asp Met Asp Thr Glu Leu Asp Ala Leu Gln Gln Arg Leu Ser Lys Thr
 35 40 45
 Lys Thr Ile Lys Gln Gly Met Met Gln Glu Leu Leu Thr Gly Lys Thr
 50 55 60
 Arg Leu Val
 65

<210> 2223
 <211> 482
 <212> DNA
 <213> Homo sapiens

<400> 2223
 cggccgccgc ggtagtgagc cctgcgtcgg tggcgtaatg gaaaatgctg cgctgggttg
 60
 acaggcgcca gacattgttg tggacgatgc cgctgtcgat cggtgccacg ccggtgaaga
 120
 tgcatttatc caacggccgg gacagggccg gcagttcaca gtccagtttg taaagcgctg
 180
 cgcgtcctgc gctgatatag gcctggagat gcccattggc gtgtcgggca acctcgtagt
 240
 tcaggccgctc gagcaccaca aggatgacgt tgtgcttcat aaggggagac gctccgcaac
 300
 gataggcttg actcatttca cttgaggaac ggggtcaaaa ctgtgggcgc gggcaagccc
 360
 gctccacac aagcccgtgc ccacattgga tctccaatgt gggctacagc cttactgcat
 420
 attgatgatg acttcttctt gccacttctg cggcagtgcc ttggaggtct tttccacgc
 480
 gt
 482

<210> 2224
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2224
 Met Ser Gln Ala Tyr Arg Cys Gly Ala Ser Pro Leu Met Lys His Asn


```

      1           5           10           15
Val Ile Leu Val Val Leu Asp Gly Leu Asn Tyr Glu Val Ala Arg His
      20           25           30
Ala Met Gly His Leu Gln Ala Tyr Ile Ser Ala Gly Arg Ala Ala Leu
      35           40           45
Tyr Lys Leu Asp Cys Glu Leu Pro Ala Leu Ser Arg Pro Leu Asp Lys
      50           55           60
Cys Ile Phe Thr Gly Val Pro Pro Ile Asp Ser Gly Ile Val His Asn
      65           70           75           80
Asn Val Ser Arg Leu Ser Asn Gln Arg Ser Ile Phe His Tyr Ala Thr
      85           90           95
Asp Ala Gly Leu Thr Thr Ala Ala Ala
      100           105

```

<210> 2225
 <211> 753
 <212> DNA
 <213> Homo sapiens

```

<400> 2225
nacgcgtctg atccacacgg gccactgacg tggcggttatg acagggagcg ggccggtgccc
60
ggcggtcatcc tcgatctcat gggtcacgga gaggatctcg tccagtatct actcaaaggg
120
cgattcactg aggtgtccgc cgtgtccgag acgttcatcc gtcagcgtcc caagccactc
180
aaggagggca tcggccacac aggttggggtc gtctcggacg agtcggggcc ggtgggcaac
240
gaggattatt gcgctgtcat cgcccgtatg gaaaacggag tgatgtgcac cctggagtcc
300
agtcgggtca gtgttgggcc gcgcgcggag tacatcgctg agatctatgg aaccgacgga
360
tcaatccggt ggaacttcga ggatctcaac catttgcagg tctgtctggg gcgaaacaat
420
cgtgccctgc agggatatgt caactgcatg gccggaccag acttcccgga gttcatgcgt
480
ttccaaccgg gagccggaac atccatgggc tttgacgaca tgaaggtcgt tgaggctgcg
540
aaattcgtcc gaggggtctt ggatgggcag caatatggcc catctgtcgc cgatggttgg
600
gcctcagcgg aggtcaacga tgcgatcgtt gcctcctcgc ggggaccatg cctggcatga
660
cgtgaagccg gtttcgggga gaaccacgtt cgataagtga ccgcgtcatc gcgtgtctgt
720
gaccaggcct ggcggcacaa ccaggtcgcc ggc
753

```

<210> 2226
 <211> 219
 <212> PRT
 <213> Homo sapiens

```

<400> 2226
Xaa Ala Ser Asp Pro His Gly Pro Leu Thr Trp Arg Tyr Asp Arg Glu

```

```

      1           5           10           15
Arg Ala Gly Ala Gly Val Ile Leu Asp Leu Met Gly His Gly Glu Asp
      20           25           30
Leu Val Gln Tyr Leu Leu Lys Gly Arg Phe Thr Glu Val Ser Ala Val
      35           40           45
Ser Glu Thr Phe Ile Arg Gln Arg Pro Lys Pro Leu Lys Glu Gly Ile
      50           55           60
Gly His Thr Gly Trp Val Val Ser Asp Glu Leu Gly Pro Val Gly Asn
      65           70           75           80
Glu Asp Tyr Cys Ala Val Ile Ala Arg Met Glu Asn Gly Val Met Cys
      85           90           95
Thr Leu Glu Ser Ser Arg Val Ser Val Gly Pro Arg Ala Glu Tyr Ile
      100          105          110
Val Glu Ile Tyr Gly Thr Asp Gly Ser Ile Arg Trp Asn Phe Glu Asp
      115          120          125
Leu Asn His Leu Gln Val Cys Leu Gly Arg Asn Asn Arg Ala Leu Gln
      130          135          140
Gly Tyr Val Asn Cys Met Ala Gly Pro Asp Phe Pro Glu Phe Met Arg
      145          150          155          160
Phe Gln Pro Gly Ala Gly Thr Ser Met Gly Phe Asp Asp Met Lys Val
      165          170          175
Val Glu Ala Ala Lys Phe Val Arg Gly Val Leu Asp Gly Gln Gln Tyr
      180          185          190
Gly Pro Ser Val Ala Asp Gly Trp Ala Ser Ala Glu Val Asn Asp Ala
      195          200          205
Ile Val Ala Ser Cys Gly Gly Pro Cys Leu Ala
      210          215

```

<210> 2227

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2227

```

ggatccgaaa cgttgggagc ataaagcagc atggcgacc tactgaagac ggtggtggct
60
ggctgttcat gtcctttect tagcaacttg gggctcctcta aggttctacc tgggaagaga
120
gactttgtac gaacgcttcg tactcaccag gcactgtggt gtaaattcccc ggtaaagcca
180
ggaattccat ataagcagtt gacagttggg gtccccaagg agattttcca aaacgagaag
240
cgagttgcat tgtctcctgc ggggggtccag gccctgggtca agcagggctt caatgttgtc
300
gtggaatcag gcgcaggcga agct
324

```

<210> 2228

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2228

```

Met Ala His Leu Leu Lys Thr Val Val Ala Gly Cys Ser Cys Pro Phe

```

```

      1           5           10           15
Leu Ser Asn Leu Gly Ser Ser Lys Val Leu Pro Gly Lys Arg Asp Phe
      20           25           30
Val Arg Thr Leu Arg Thr His Gln Ala Leu Trp Cys Lys Ser Pro Val
      35           40           45
Lys Pro Gly Ile Pro Tyr Lys Gln Leu Thr Val Gly Val Pro Lys Glu
      50           55           60
Ile Phe Gln Asn Glu Lys Arg Val Ala Leu Ser Pro Ala Gly Val Gln
      65           70           75           80
Ala Leu Val Lys Gln Gly Phe Asn Val Val Val Glu Ser Gly Ala Gly
      85           90           95
Glu Ala

```

<210> 2229

<211> 320

<212> DNA

<213> Homo sapiens

<400> 2229

```

acgcgtgaag gggccctgtg acgaggtcat ttctgtccat ggggggtcca gatggtgagg
60
cccacagaga gggaacgggc ggggggaggg gaggagagaa gacagactca ggcagaaccc
120
tagctcagcc ccttctctgcg tgcctggccc tgggaggatg ccatccccag tcccctcttc
180
tgggcctctg tctggggact cggcacagat ggatccagtg catcctcagc cccttgagaa
240
gctgtgctgc catcagctcc ttctctgggt acagggcacg ggaagcggct gccagcagg
300
cctcggtccc gccaaagtgt
320

```

<210> 2230

<211> 94

<212> PRT

<213> Homo sapiens

<400> 2230

```

Met Gly Gly Pro Asp Gly Glu Ala His Arg Glu Gly Thr Gly Gly Gly
  1           5           10           15
Arg Gly Gly Glu Lys Thr Asp Ser Gly Arg Thr Leu Ala Gln Pro Leu
      20           25           30
Pro Ala Cys Leu Ala Leu Gly Gly Cys His Pro Gln Ser Pro Leu Leu
      35           40           45
Gly Pro Ala Leu Gly Thr Arg His Arg Trp Ile Gln Cys Ile Leu Ser
      50           55           60
Pro Leu Arg Ser Cys Ala Ala Ile Ser Ser Phe Ser Gly Tyr Arg Ala
      65           70           75           80
Arg Glu Ala Ala Ala Gln Gln Ala Ser Val Pro Pro Ser Cys
      85           90

```

<210> 2231

<211> 671

<212> DNA

<213> Homo sapiens

<400> 2231

```

gggctgtcta ccacgggctt cgggacttgg ggcagcttcc tgagctctct gagctgcagt
60
tccttcaacc aaaaaatgag gagagtgcag gacctcagag gcttactgtg aggatggaga
120
aaagcccagt tcaatgcccc actgggaaat gcttcccatt aattgtggaa ttgtcgtgcc
180
catttactgt cgggggtgaca ggggggggtgg gggtcagagt agagacagga gaaggaagtg
240
agcatttgtg ggataccac cacgtgccag ggactgaacc ctatctggat ctctgcagc
300
cctcccaatg gcaactgtgaa gccagtgttg ttttacagat gaggaaactg agatttgtgg
360
ctataacaga taaacagatg accctgaatg gggcaggtca tgtcatctgc catagataca
420
tgcatagaac aatgcaaacc agtcagtcac ctctgagtca gaccaggctg accatcaggg
480
acatgcagac actggcaggg ctgggggtgt tccccatcgg tgatagcctg gtgcccccat
540
ggccccctgat gccacaggct gtctggaagg ctgggtcact gctgagaaga caaggagaca
600
ttttctctca ccagctttct ttttctatt ccttcttaga cacctgagct gcggtgatca
660
cagctcttaa g
671

```

<210> 2232

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2232

```

Met Glu Lys Ser Pro Val Gln Cys Pro Thr Gly Lys Cys Phe Pro Leu
1          5          10          15
Ile Val Glu Leu Ser Cys Pro Phe Thr Val Gly Val Thr Gly Gly Val
20          25          30
Gly Val Arg Val Glu Thr Gly Glu Gly Ser Glu His Leu Trp Asp Thr
35          40          45
His His Val Pro Gly Thr Glu Pro Tyr Leu Asp Leu Leu Gln Pro Ser
50          55          60
Gln Trp His Cys Glu Ala Ser Val Val Leu Gln Met Arg Lys Leu Arg
65          70          75          80
Phe Val Ala Ile Thr Asp Lys Gln Met Thr Leu Asn Gly Ala Gly His
85          90          95
Val Ile Cys His Arg Tyr Met His Arg Thr Met Gln Thr Ser Gln Ser
100         105         110
Pro Leu Ser Gln Thr Arg Leu Thr Ile Arg Asp Met Gln Thr Leu Ala
115         120         125
Gly Leu Gly Leu Phe Pro Ile Gly Asp Ser Leu Val Pro Pro Trp Pro
130         135         140
Leu Met Pro Thr Ala Val Trp Lys Ala Gly Ser Leu Leu Arg Arg Gln

```

1639

gctggaaaaa atcagggtgct cgtggtttgtc cattctcgca aagaaactgg gaagacagca
1320
agggcaatcc gtgacatgtg tctggagaag gacactttgg gtctgtttct tcgcgagggt
1380
tctgcctcca ctgaagtcct tcgtacagaa gcagagcagt gcaagaactt ggagctgaag
1440
gatcttttgc cctatggcct tgctattcat catgcaggca tgactagagt tgaccgaaca
1500
ctcgtggagg atctttttgc tgataaacat attcagggtt tagtttccac cgcaactcta
1560
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1620
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<210> 2234
 <211> 1701
 <212> PRT
 <213> Homo sapiens

<400> 2234
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 Pro Lys Tyr Ala Gln Ala Gly Phe Glu Gly Phe Lys Thr Leu Asn Arg
 35 40 45
 Ile Gln Ser Lys Leu Tyr Arg Ala Ala Leu Glu Thr Asp Glu Asn Leu
 50 55 60
 Leu Leu Cys Ala Pro Thr Gly Ala Gly Lys Thr Asn Val Ala Leu Met
 65 70 75 80
 Cys Met Leu Arg Glu Ile Gly Lys His Ile Asn Met Asp Gly Thr Ile
 85 90 95
 Asn Val Asp Asp Phe Lys Ile Ile Tyr Ile Ala Pro Met Arg Ser Leu
 100 105 110
 Val Gln Glu Met Val Gly Ser Phe Gly Lys Arg Leu Ala Thr Tyr Gly
 115 120 125
 Ile Thr Val Ala Glu Leu Thr Gly Asp His Gln Leu Cys Lys Glu Glu
 130 135 140
 Ile Ser Ala Thr Gln Ile Ile Val Cys Thr Pro Glu Lys Trp Asp Ile
 145 150 155 160
 Ile Thr Arg Lys Gly Gly Glu Arg Thr Tyr Thr Gln Leu Val Arg Leu
 165 170 175
 Ile Val Leu Asp Glu Ile His Leu Leu His Asp Asp Arg Gly Pro Val
 180 185 190
 Leu Glu Ala Leu Val Ala Arg Ala Ile Arg Asn Ile Glu Met Thr Gln
 195 200 205
 Glu Asp Val Arg Leu Ile Gly Leu Ser Ala Thr Leu Pro Asn Tyr Glu
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 Asp Val Ala Thr Phe Leu Arg Val Asp Pro Ala Lys Gly Leu Phe Tyr
 225 230 235 240
 Phe Asp Asn Ser Phe Arg Pro Val Pro Leu Glu Gln Thr Tyr Val Gly
 245 250 255
 Ile Thr Glu Lys Lys Ala Ile Lys Arg Phe Gln Ile Met Asn Glu Ile
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 Val Tyr Glu Lys Ile Met Glu His Ala Gly Lys Asn Gln Val Leu Val
 275 280 285
 Phe Val His Ser Arg Lys Glu Thr Gly Lys Thr Ala Arg Ala Ile Arg
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 Asp Met Cys Leu Glu Lys Asp Thr Leu Gly Leu Phe Leu Arg Glu Gly
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 Ser Ala Ser Thr Glu Val Leu Arg Thr Glu Ala Glu Gln Cys Lys Asn
 325 330 335
 Leu Glu Leu Lys Asp Leu Leu Pro Tyr Gly Phe Ala Ile His His Ala

1644

770	775	780
Ala Phe Trp Ile Leu Val Glu Asp Val Asp Ser Glu Val Ile Leu His		
785	790	795
His Glu Tyr Phe Leu Leu Lys Ala Lys Tyr Ala Gln Asp Glu His Leu		800
	805	810
Ile Thr Phe Phe Val Pro Val Phe Glu Pro Leu Pro Pro Gln Tyr Phe		815
	820	825
Ile Arg Val Val Ser Asp Arg Trp Leu Ser Cys Glu Thr Gln Leu Pro		830
	835	840
Val Ser Phe Arg His Leu Ile Leu Pro Glu Lys Tyr Pro Pro Pro Thr		845
	850	855
Glu Leu Leu Asp Leu Gln Pro Leu Pro Val Ser Ala Leu Arg Asn Ser		860
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Ala Phe Glu Ser Leu Tyr Gln Asp Lys Phe Pro Phe Phe Asn Pro Ile		880
	885	890
Gln Thr Gln Val Phe Asn Thr Val Tyr Asn Ser Asp Asp Asn Val Phe		895
	900	905
Val Gly Ala Pro Thr Gly Ser Gly Lys Thr Ile Cys Ala Glu Phe Ala		910
	915	920
Ile Leu Arg Met Leu Leu Gln Ser Ser Glu Gly Arg Cys Val Tyr Ile		925
	930	935
Thr Pro Met Glu Ala Leu Ala Glu Gln Val Tyr Met Asp Trp Tyr Glu		940
945	950	955
Lys Phe Gln Asp Arg Leu Asn Lys Lys Val Val Leu Leu Thr Gly Glu		960
	965	970
Thr Ser Thr Asp Leu Lys Leu Leu Gly Lys Gly Asn Ile Ile Ile Ser		975
	980	985
Thr Pro Glu Lys Trp Asp Ile Leu Ser Arg Arg Trp Lys Gln Arg Lys		990
	995	1000
Asn Val Gln Asn Ile Asn Leu Phe Val Val Asp Glu Val His Leu Ile		1005
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Gly Gly Glu Asn Gly Pro Val Leu Glu Val Ile Cys Ser Arg Met Arg		1020
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Tyr Ile Ser Ser Gln Ile Glu Arg Pro Ile Arg Ile Val Ala Leu Ser		1040
	1045	1050
Ser Ser Leu Ser Asn Ala Lys Asp Val Ala His Trp Leu Gly Cys Ser		1055
	1060	1065
Ala Thr Ser Thr Phe Asn Phe His Pro Asn Val Arg Pro Val Pro Leu		1070
	1075	1080
Glu Leu His Ile Gln Gly Phe Asn Ile Ser His Thr Gln Thr Arg Leu		1085
	1090	1095
Leu Ser Met Ala Lys Pro Val Tyr His Ala Ile Thr Lys His Ser Pro		1100
1105	1110	1115
Lys Lys Pro Val Ile Val Phe Val Pro Ser Arg Lys Gln Thr Arg Leu		1120
	1125	1130
Thr Ala Ile Asp Ile Leu Thr Thr Cys Ala Ala Asp Ile Gln Arg Gln		1135
	1140	1145
Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu Glu Lys		1150
	1155	1160
Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr		1165
	1170	1175
Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu		1180
1185	1190	1195
Phe Ser Ser Gly Ala Ile Gln Val Val Val Ala Ser Arg Ser Leu Cys		1200

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Trp Gly Met Asn Val Ala Ala His Leu Val Ile Ile Met Asp Thr Gln					
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Tyr Tyr Asn Gly Lys Ile His Ala Tyr Val Asp Tyr Pro Ile Tyr Asp					
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Val Leu Gln Met Val Gly His Ala Asn Arg Pro Leu Gln Asp Asp Glu					
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Gly Arg Cys Val Ile Met Cys Gln Gly Ser Lys Lys Asp Phe Phe Lys					
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Lys Phe Leu Tyr Glu Pro Leu Pro Val Glu Ser His Leu Asp His Cys					
	1285		1290		1295
Met His Asp His Phe Asn Ala Glu Ile Val Thr Lys Thr Ile Glu Asn					
	1300		1305		1310
Lys Gln Asp Ala Val Asp Tyr Leu Thr Trp Thr Phe Leu Tyr Arg Arg					
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Met Thr Gln Asn Pro Asn Tyr Tyr Asn Leu Gln Gly Ile Ser His Arg					
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His Leu Ser Asp His Leu Ser Glu Leu Val Glu Gln Thr Leu Ser Asp					
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Leu Glu Gln Ser Lys Cys Ile Ser Ile Glu Asp Glu Met Asp Val Ala					
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Pro Leu Asn Leu Gly Met Ile Ala Ala Tyr Tyr Tyr Ile Asn Tyr Thr					
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Thr Ile Glu Leu Phe Ser Met Ser Leu Asn Ala Lys Thr Lys Val Arg					
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Gly Leu Ile Glu Ile Ile Ser Asn Ala Ala Glu Tyr Glu Asn Ile Pro					
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Ile Arg His His Glu Asp Asn Leu Leu Arg Gln Leu Ala Gln Lys Val					
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Pro His Lys Leu Asn Asn Pro Lys Phe Asn Asp Pro His Val Lys Thr					
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Asn Leu Leu Leu Gln Ala His Leu Ser Arg Met Gln Leu Ser Ala Glu					
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Leu Gln Ser Asp Thr Glu Glu Ile Leu Ser Lys Ala Ile Arg Leu Ile					
	1475		1480		1485
Gln Ala Cys Val Asp Val Leu Ser Ser Asn Gly Trp Leu Ser Pro Ala					
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Leu Ala Ala Met Glu Leu Ala Gln Met Val Thr Gln Ala Met Trp Ser					
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Lys Asp Ser Tyr Leu Lys Gln Leu Pro His Phe Thr Ser Glu His Ile					
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Lys Arg Cys Thr Asp Lys Gly Val Glu Ser Val Phe Asp Ile Met Glu					
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Met Glu Asp Glu Glu Arg Asn Ala Leu Leu Gln Leu Thr Asp Ser Gln					
	1555		1560		1565
Ile Ala Asp Val Ala Arg Phe Cys Asn Arg Tyr Pro Asn Ile Glu Leu					
	1570		1575		1580
Ser Tyr Glu Val Val Asp Lys Asp Ser Ile Arg Ser Gly Gly Pro Val					
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Val Val Leu Val Gln Leu Glu Arg Glu Glu Glu Val Thr Gly Pro Val					
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Ile Ala Pro Leu Phe Pro Gln Lys Arg Glu Glu Gly Trp Trp Val Val					
	1620		1625		1630
Ile Gly Asp Ala Lys Ser Asn Ser Leu Ile Ser Ile Lys Arg Leu Thr					

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 Gly Ala His Asn Tyr Thr Leu Tyr Phe Met Ser Asp Ala Tyr Met Gly
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 Asp Ser Asp Ser Asp
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 <211> 586
 <212> DNA
 <213> Homo sapiens

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<210> 2236
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 <212> PRT
 <213> Homo sapiens

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 Asp Pro Lys Asp Gly Leu Asn Phe Asn Leu Glu Leu Glu Arg Gln Thr
 35 40 45
 Leu Asp Gln Asp Pro Leu Ser Lys Val Leu Ala Gly Val Ala Leu Gly
 50 55 60
 Gly Tyr Ser Val Pro Arg Leu His Pro Arg Gln Val Pro Gly Arg Gly
 65 70 75 80
 Glu Ala Gly Pro Gly Ala Gly Ala Ala Val Glu Gly Leu His Cys Ala

85 90 95
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 Ser Gln Leu Pro Gly Ser Ser Gly Arg Arg Cys
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<210> 2237
 <211> 421
 <212> DNA
 <213> Homo sapiens

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<210> 2238
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 2238
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 35 40 45
 Gln Leu Glu Pro Ile Val Gln Gln Val Leu Ala Glu Glu Pro Leu Ala
 50 55 60
 Pro His Cys Pro Thr Pro Asp Gln Gly Asp Ala Leu Glu Glu Gly Leu
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 Asp Leu Ser Ser Ser Leu Ser Ala Pro Asp His Phe Gln Gly Leu Ser
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 Ser Ser Trp Leu Gln Trp Asp Thr Gly Val Pro Ser
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<210> 2239
 <211> 623

<212> DNA

<213> Homo sapiens

<400> 2239

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<210> 2240

<211> 207

<212> PRT

<213> Homo sapiens

<400> 2240

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Asn	Lys	Ala	Lys	Ser	Pro	Gly	Val	Arg	Gln	Pro	Gly	Ser	Ser	Ser	Ser
			35				40					45			
Ser	Ala	Pro	Gly	Gln	Pro	Ser	Thr	Gly	Val	Ala	Arg	Pro	Thr	Val	Ser
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Ser	Gly	Pro	Val	Pro	Arg	Arg	Gln	Asn	Gly	Ser	Ser	Ser	Ser	Gly	Pro
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Glu	Arg	Ser	Ile	Ser	Gly	Ser	Lys	Lys	Pro	Thr	Asn	Asp	Ser	Asn	Pro
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Ser	Arg	Arg	Thr	Val	Ser	Gly	Thr	Cys	Gly	Pro	Gly	Gln	Pro	Ala	Ser
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Ser	Ser	Gly	Pro	Gly	Arg	Pro	Ile	Ser	Gly	Ser	Val	Ser	Ser	Ala	
			115				120				125				
Arg	Pro	Leu	Gly	Ser	Ser	Arg	Gly	Pro	Gly	Arg	Pro	Val	Ser	Ser	Pro
			130				135				140				
His	Glu	Leu	Arg	Arg	Pro	Val	Ser	Gly	Leu	Gly	Pro	Pro	Gly	Arg	Ser
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1650


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His Val Pro Ser Ser Ser Ser Pro Asp Ala Ile Pro Ala Arg Thr Arg
      35          40          45
Ala Ala Ser Leu Gly Phe Leu Cys Ser Ser Pro His Tyr Leu Gly Ile
      50          55          60
Tyr Phe Pro Ser Leu Leu Arg Asn Asp Asn Thr Val Leu Cys Thr Tyr
65          70          75          80
Leu Val Phe Leu Leu Phe Ala Ser Asp Met Gln Leu Asn Lys Ser Glu

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<210> 2245
 <211> 632
 <212> DNA
 <213> Homo sapiens

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 tcgagagaag aggtcggacg cgagaggctc aactatggtc acaccttggc ccacgctatt
 120
 gagggccaca agcatttcac gtggcgctcat ggcgaggctg acgcgggtggg catggtgttt
 180
 gcggccgaac tgtcgcaccg gtacctggga ctgtccgatg aggtcgttgc gcgcaccgcg
 240
 actatcctgt ctgagatcgg attgcctgtt acctgtgacg agattaagtg ggcagatctg
 300
 cgcaagacga tgaacgtgga caagaaaacc agggtagacc cgcagaccgg gcgtcaagtg
 360
 ttgcggtttg tcggtattca caaaccgggt caggctcgcca tgatcgctga ccctgacgag
 420
 gccgcttttag ccgagtgtta cgaccgggtg tccgcacggt aaaaacgttc ggaaatgaac
 480
 atgtggctgc gggtcagtcg gcattcaggc ctccgtgacg ccgtcgaccc caagtgatgt
 540
 gacgattcgg gaaatatctt gttgggcact cttgagcctc gcctgattcc ccataccga
 600
 cttaagtcca gtatcgacgg catgaatccg ga
 632

<210> 2246
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 2246
 Thr Arg Ala Ile Thr Val Lys Ala Gly Val Val Ser Ala Asp Leu His
 1 5 10 15
 Glu Arg Thr Ser Ser Arg Glu Glu Val Gly Arg Glu Arg Leu Asn Tyr
 20 25 30
 Gly His Thr Leu Ala His Ala Ile Glu Ala His Lys His Phe Thr Trp
 35 40 45
 Arg His Gly Glu Ala Asp Ala Val Gly Met Val Phe Ala Ala Glu Leu
 50 55 60
 Ser His Arg Tyr Leu Gly Leu Ser Asp Glu Val Val Ala Arg Thr Arg
 65 70 75 80
 Thr Ile Leu Ser Glu Ile Gly Leu Pro Val Thr Cys Asp Glu Ile Lys
 85 90 95
 Trp Ala Asp Leu Arg Lys Thr Met Asn Val Asp Lys Lys Thr Arg Val
 100 105 110
 Asp Pro Gln Thr Gly Arg Gln Val Leu Arg Phe Val Gly Ile His Lys

1653

cccgcaaggg aaagtgagaa agcaattaag ttgggaaccg cgggggttttc ccattcccac
 120
 ggtggaaacc gcgccagtg aattgaaatc cgcttcctta aggcgaaatg ggcccttaaa
 180
 aggcaaggtc aaccgcccgc cagtgtgatg gaatttgcaa gaattcggtt tagcacctc
 240
 ccggcttttc tcccgaccgc gtgcaggggtg ggctgcgctg ggctggggag gaactgggag
 300
 ctgggggctc atgtcctgta taaaggggct gcaggggcgc tgtctcccc cagaagactg
 360
 gccacatggg gacaggcctc ctgggggcag atct
 394

<210> 2250

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2250

Met	Ser	Pro	Gln	Leu	Pro	Val	Pro	Pro	Arg	Pro	Ser	Ala	Ala	His	Pro
1				5					10					15	
Ala	Arg	Gly	Arg	Glu	Lys	Ser	Arg	Glu	Gly	Ala	Lys	Pro	Asn	Ser	Cys
			20					25					30		
Lys	Phe	His	His	Thr	Gly	Gly	Arg	Leu	Thr	Leu	Pro	Phe	Lys	Gly	Pro
		35				40						45			
Phe	Arg	Leu	Lys	Glu	Ala	Asp	Phe	Asn	Ser	Leu	Ala	Ala	Val	Ser	Thr
	50					55					60				
Val	Gly	Met	Gly	Lys	Pro	Arg	Gly	Ser	Gln	Leu	Asn	Cys	Phe	Leu	Thr
65					70				75					80	
Phe	Pro	Cys	Gly	Leu	Ser	Trp	Leu	Leu	Leu	Pro	Glu	Leu	Arg	Gly	Leu
				85				90						95	
Tyr	Thr	Pro	Cys	Tyr	Pro	Val	Phe								
				100											

<210> 2251

<211> 654

<212> DNA

<213> Homo sapiens

<400> 2251

acgcgtactt attcgccacc atgattatga ccagtgtttc cagtccgttc agttgttgca
 60
 gtggaatagt caggttaaatt ttaatgtgac cgtttatcgc aatctgccga ccactcgcca
 120
 ttcaatcatg acttcgtgat aaaagattga gtgtgagggtt ataacgccga agcggtaaaa
 180
 attttaattt ttgccgctga ggggttgacc aagcgaagcg cggtaggttt tctgcttagg
 240
 agtttaattca tgtttcagac ttttatttct cgccataatt caaacttttt ttctgataag
 300
 ctggtttca cttctgttac tccagcttct tcggcacctg ttttacagac acctaaagct
 360
 acatcgtcaa cgttatattt tgatagtttg acggttaatg ctggtaatgg tggttttctt
 420

cattgcattc agatggatac atctgtcaac gccgctaac aggttgtttc tgttggtgct
 480
 gatattgctt ttgatgccga ccctaaattt tttgcctggt tggttcgctt tgagtcttct
 540
 tcggttccga ctaccctccc gactgcctat gatgtttatc ctttggtatg tcgccatgat
 600
 ggtggttatt ataccgtcaa ggactgtgtg actattgacg tccttcctcg tacg
 654

<210> 2252

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2252

Met	Phe	Gln	Thr	Phe	Ile	Ser	Arg	His	Asn	Ser	Asn	Phe	Phe	Ser	Asp
1				5					10					15	
Lys	Leu	Val	Leu	Thr	Ser	Val	Thr	Pro	Ala	Ser	Ser	Ala	Pro	Val	Leu
			20					25					30		
Gln	Thr	Pro	Lys	Ala	Thr	Ser	Ser	Thr	Leu	Tyr	Phe	Asp	Ser	Leu	Thr
			35					40				45			
Val	Asn	Ala	Gly	Asn	Gly	Gly	Phe	Leu	His	Cys	Ile	Gln	Met	Asp	Thr
	50				55						60				
Ser	Val	Asn	Ala	Ala	Asn	Gln	Val	Val	Ser	Val	Gly	Ala	Asp	Ile	Ala
65					70					75				80	
Phe	Asp	Ala	Asp	Pro	Lys	Phe	Phe	Ala	Cys	Leu	Val	Arg	Phe	Glu	Ser
			85					90					95		
Ser	Ser	Val	Pro	Thr	Thr	Leu	Pro	Thr	Ala	Tyr	Asp	Val	Tyr	Pro	Leu
			100					105					110		
Asp	Gly	Arg	His	Asp	Gly	Gly	Tyr	Tyr	Thr	Val	Lys	Asp	Cys	Val	Thr
			115				120					125			
Ile	Asp	Val	Leu	Pro	Arg	Thr									
			130			135									

<210> 2253

<211> 327

<212> DNA

<213> Homo sapiens

<400> 2253

ggatcctgct gggcctcttt tacgtgatgt tgaccagcc gctggtgcgc attattcgcg
 60
 cactgagcac cagcaagcag gcccgctgg attgccacc gggtcacgaa aacgatgaaa
 120
 tcggcgatt ggtcaacgtc gcccaaccagc aattcgacaa tatggaaacc gaaatcgagc
 180
 agcgccgcca cgccgaggac cgcctcaccg aatacctggg ccaactggaa gatatcgctt
 240
 ccgcacgcac cctggagctc aaggccagca accaacgctt gagccaatcc aacgatgagc
 300
 tggaagcggc aaagttgacc gccttgg
 327

<210> 2254

<211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2254
 Met Leu Thr Gln Pro Leu Val Arg Ile Ile Arg Ala Leu Ser Thr Ser
 1 5 10 15
 Lys Gln Ala Arg Leu Asp Cys Pro Pro Gly His Glu Asn Asp Glu Ile
 20 25 30
 Gly Val Leu Val Asn Val Ala Asn Gln Gln Phe Asp Asn Met Glu Thr
 35 40 45
 Glu Ile Glu Gln Arg Arg His Ala Glu Asp Arg Leu Thr Glu Tyr Leu
 50 55 60
 Gly Gln Leu Glu Asp Ile Val Ser Ala Arg Thr Leu Glu Leu Lys Ala
 65 70 75 80
 Ser Asn Gln Arg Leu Ser Gln Ser Asn Asp Glu Leu Glu Ala Ala Lys
 85 90 95
 Leu Thr Ala Leu
 100

<210> 2255
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 2255
 nngctagcac atgagaagtg tgaagtttat actttgcttg ggcgatcacg ccgttttcca
 60
 aatatggctc atgcaacttc tggccaaagg ggctcacattg agcgtgctgc tatcaatgct
 120
 cctgtacagg gcagtgacgc tgatgttgct atgtgtgcaa tgcttgagat agacaggaat
 180
 actcgtctta aggagcttgg ttggacgcta ctcttcgagg tgcattgatga agtgatactg
 240
 gaagggcctt cagagtctgc ggagtnngcc aagtccatag ttgttgagtg catgtctaag
 300
 cccttctatg gcaccaatat cctgagggtc gaccttgctg ttgatgcaa gtgtgca
 357

<210> 2256
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 2256
 Xaa Leu Ala His Glu Lys Cys Glu Val Tyr Thr Leu Leu Gly Arg Ser
 1 5 10 15
 Arg Arg Phe Pro Asn Met Ala His Ala Thr Ser Gly Gln Arg Gly His
 20 25 30
 Ile Glu Arg Ala Ala Ile Asn Ala Pro Val Gln Gly Ser Ala Ala Asp
 35 40 45
 Val Ala Met Cys Ala Met Leu Glu Ile Asp Arg Asn Thr Arg Leu Lys
 50 55 60
 Glu Leu Gly Trp Thr Leu Leu Leu Gln Val His Asp Glu Val Ile Leu

```
<210> 2257
<211> 626
<212> DNA
<213> Homo sapiens
```

```
<210> 2258
<211> 187
<212> PRT
<213> Homo sapiens
```

1657

<400> 2260															
Met	Lys	Asn	Arg	Leu	Gln	Val	Thr	Glu	Ala	Thr	Val	Met	Val	Thr	Val
1				5					10					15	
Leu	Ser	Gly	Pro	Arg	Gln	Gly	Asp	Lys	Thr	Ile	Tyr	Ala	Glu	Asp	Gly
			20					25					30		
Arg	Val	Leu	Tyr	Gly	Thr	Pro	Ile	Glu	Gly	Phe	Thr	Val	Asp	Lys	Ala
		35					40					45			
Lys	Leu	Asn	Ser	Leu	Cys	Met	Val	Gly	Glu	Met	Glu	Cys	Phe	Val	Gln
		50				55					60				
Pro	Val	Glu	Asn	Asp	Pro	Ser	Val	Leu	Val	Leu	Gly	Ala	Gly	His	Val
65					70					75				80	
Ser	Arg	Ala	Ile	Thr	Asp	Leu	Leu	Leu	Phe	Ile	Gly	Cys	Arg	Val	Thr

	85		90		95										
Val	Val	Asp	Asp	Arg	Pro	Glu	Tyr	Val	Val	Pro	Glu	Phe	Phe	Asp	Glu
	100		105		110										
Arg	Val	Thr	Arg	Lys	Cys	Leu	Pro	Leu	Glu	Asn	Phe	Lys	Asn	Asp	Leu
	115		120		125										
Pro	Leu	Asp	Glu	Tyr	Asn	Gly	Phe	Ile	Ile	Val	Thr	Arg			
	130		135		140										

<210> 2261
 <211> 660
 <212> DNA
 <213> Homo sapiens

<400> 2261
 ngctagctgc tgctcctgag gatcggccgc agaatttgc tgccgatctg tccgggttgc
 60
 ttgagcccaa gcgcgaggtc gatgtgtccg gcgaccgcgc gcgttgcggt gggagcatag
 120
 tgctcgggtgca cgctgaccga gaggtccgtg cggagagtac tcccgatgat atttgcgggc
 180
 agctcgatgc cgtggccgcc atgatggccc ttgtctatgg gtcgaatgtg actattcccg
 240
 acgatgccgg gaggtctcttc gacaagcttc actgaacggt gttcaattgg tcccaacggc
 300
 tgcccatgtg ggcagccgct ctatctcgtc atgggaagga acccgatgtc gtcacgcaat
 360
 gggttccagg ccaccgacct gggtcttctc gcggtctttg cagccctcat tgctgtgcta
 420
 gccgtcatcc cgccgatgtt catggtgggg gcggtccctt ttgcccttca gatggttgcc
 480
 gtcattgctg gcgcgctggg gctgggaagt atccgtggcg gatgcgcggt aggcttgtat
 540
 atccttgtcg gcgcgctggg gctgcccgtc ttcagcggtg ggtctagcgg gattggcgtc
 600
 ctggtgggtc cactggtgg gtatctatgg ggatggctga tcggcgcttt cgtggcgggt
 660

<210> 2262
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2262
 Met Pro Gly Gly Ser Ser Thr Ser Phe Thr Glu Arg Cys Ser Ile Gly
 1 5 10 15
 Pro Asn Gly Cys Pro Cys Gly Gln Pro Leu Tyr Leu Val Met Gly Arg
 20 25 30
 Asn Pro Met Ser Ser Arg Asn Gly Phe Gln Ala Thr Asp Leu Ala Leu
 35 40 45
 Ile Ala Val Phe Ala Ala Leu Ile Ala Val Leu Ala Val Ile Pro Pro
 50 55 60
 Met Phe Met Val Gly Ala Val Pro Phe Ala Leu Gln Met Val Ala Val
 65 70 75 80
 Met Leu Ala Pro Met Val Leu Gly Ser Ile Arg Gly Gly Cys Ala Val

```

      85              90              95
Gly Leu Tyr Ile Leu Val Gly Ala Leu Gly Leu Pro Val Phe Ser Gly
      100              105              110
Gly Ser Ser Gly Ile Gly Val Leu Val Gly Pro Thr Gly Gly Tyr Leu
      115              120              125
Trp Gly Trp Leu Ile Gly Ala Phe Val Ala Gly
      130              135

```

<210> 2263
 <211> 491
 <212> DNA
 <213> Homo sapiens

<400> 2263
 nacgcgttcc cggtcgaccg aggc aaagc aaaagtaagc aggggtgccg tagtccccgt
 60
 tcccaccgcg gtatggctgg gtcactgctg acagatggcg tccccctgct gatctttccg
 120
 gagggcacc cggctcgcac cggcgcaatg ggcaccttca aacctggggc tgccgcattg
 180
 gctatttcac gtgggggttcc gggttatcccg attgcttttag taggagcatg ggcggctatg
 240
 ccgtccgagc aagccaggtt accaaaagga cgtccattgg tccacgtggc tattggacac
 300
 cctatggacc ctgttcccg cgagatcgcc caccaattct ccgaacggat tcgtcgccag
 360
 gtcattgagt tgcacgacca aaccgcccgc gcctacggca tgccaaccct tgacgaatac
 420
 ggacgccacc gcgcgctaag ccaggcctcc gagagcggcg acaccgcac caccaaccac
 480
 tcgacgtgca c
 491

<210> 2264
 <211> 163
 <212> PRT
 <213> Homo sapiens

<400> 2264
 Xaa Ala Phe Pro Val Asp Arg Gly Lys Gly Lys Ser Lys Gln Gly Ala
 1 5 10 15
 Arg Ser Pro Arg Ser His Arg Gly Met Ala Gly Ser Leu Leu Thr Asp
 20 25 30
 Gly Val Pro Leu Leu Ile Phe Pro Glu Gly Thr Arg Ser Arg Thr Gly
 35 40 45
 Ala Met Gly Thr Phe Lys Pro Gly Ala Ala Ala Leu Ala Ile Ser Arg
 50 55 60
 Gly Val Pro Val Ile Pro Ile Ala Leu Val Gly Ala Trp Ala Ala Met
 65 70 75 80
 Pro Ser Glu Gln Ala Arg Leu Pro Lys Gly Arg Pro Leu Val His Val
 85 90 95
 Ala Ile Gly His Pro Met Asp Pro Val Pro Gly Glu Ile Ala His Gln
 100 105 110
 Phe Ser Glu Arg Ile Arg Arg Gln Val Ile Glu Leu His Asp Gln Thr

```

      115      120      125
Ala Arg Ala Tyr Gly Met Pro Thr Leu Asp Glu Tyr Gly Arg His Arg
      130      135      140
Ala Leu Ser Gln Ala Ser Glu Ser Gly Asp Thr Ala Ser Thr Asn His
145      150      155      160
Ser Thr Cys

```

<210> 2265
 <211> 328
 <212> DNA
 <213> Homo sapiens

```

<400> 2265
ccatgggaat agccaacac gcatggatct actgtataac ttgcctgcca tcaggaaaga
60
gtcaacacgg cagacacatg ctggcagaaa cctgctgga gttgccctg agcattgatg
120
cataccaccc gagaggagga gaggggtggtg ggagaaatca gatcagagtt caaaatgcac
180
cggaagggct cggaatgta agactgcacc ttgcaggaac tgtcaatgcc actaccaata
240
tcactcactt acgtcaagca cttgagagca gctgcgaaca caattctctg actcctaacc
300
tttagcacgt gactgggacc actggaca
328

```

<210> 2266
 <211> 100
 <212> PRT
 <213> Homo sapiens

```

<400> 2266
Met Gly Ile Gly Gln His Gly Trp Ile Tyr Cys Ile Thr Cys Leu Pro
1      5      10      15
Ser Gly Lys Ser Gln His Gly Arg His Met Leu Ala Glu Thr Leu Leu
      20      25      30
Glu Leu Pro Leu Ser Ile Asp Ala Tyr His Pro Arg Gly Gly Glu Gly
      35      40      45
Gly Gly Arg Asn Gln Ile Arg Val Gln Asn Ala Pro Glu Gly Leu Gly
      50      55      60
Asn Val Arg Leu His Leu Ala Gly Thr Val Asn Ala Thr Thr Asn Ile
65      70      75      80
Thr His Leu Arg Gln Ala Leu Glu Ser Ser Cys Glu His Asn Ser Leu
      85      90      95
Thr Pro Asn Leu
      100

```

<210> 2267
 <211> 370
 <212> DNA
 <213> Homo sapiens

<400> 2267

agatctatgc aggtagcgct ggtctccggg gggtaaagtg tccactccct gtcagatggc
 60
 agaccatgga gggctaagtc aggtctgggaa ggctaggcag agttcccaga aacaggtcac
 120
 cgaggagacc accactgaat tgcactctcg ctggggagtt aagccatata cccctaagac
 180
 agcagtgacc ggagtggcca atctgtacag ggacaggctc aaggccacag caactcaggg
 240
 gacagagatg gtgaagcagg catgtcctaa agcctccctt ctttaaccctg accttgaagg
 300
 acaggaaaca agtcatttac gtatgttgta ggcctagagc aagggtattgc agagatgggc
 360
 gtcaacgcgt
 370

<210> 2268

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2268

Met	Ala	Asp	His	Gly	Gly	Leu	Met	Gln	Ala	Gly	Lys	Ala	Arg	Gln	Ser
1				5					10					15	
Ser	Gln	Lys	Gln	Val	Thr	Glu	Gly	Ala	Thr	Thr	Glu	Leu	His	Ser	Arg
			20					25					30		
Trp	Gly	Val	Lys	Pro	Tyr	Pro	Pro	Lys	Thr	Ala	Val	Thr	Gly	Val	Ala
		35					40					45			
Asn	Leu	Tyr	Arg	Asp	Arg	Leu	Lys	Ala	Thr	Ala	Thr	Gln	Gly	Thr	Glu
	50					55				60					
Met	Val	Lys	Gln	Ala	Cys	Pro	Lys	Ala	Ser	Leu	Leu	Asn	Pro	Asp	Leu
65					70					75				80	
Glu	Gly	Gln	Glu	Thr	Ser	His	Leu	Arg	Met	Leu					
			85						90						

<210> 2269

<211> 507

<212> DNA

<213> Homo sapiens

<400> 2269

ctctccgacc gcgtcaaccc cggcaatata cgcaagttcg acgaccagat cgaatcgatt
 60
 tgtaaggctg ccaccgagca cggtagcagc atccgaatcg gcgtgaatgc tgggtctctc
 120
 gacaaacgtc tgcttgacaa atacggagcc ccgaccgccg aggctatggt ggagtcggca
 180
 ctgtgggagg ccagcctctt tgagcaatac ggattccggg atttcaaaat ctcggtgaag
 240
 caccacgacc cggtcgtcat gatccgtgcc tatgaacagc tcgccgcaa atgcgattat
 300
 ccccttcatt tgggcgttac tgaggctggt ccggccttcc aaggcaccat caagtcggcg
 360
 gtggccttcg ggcattctct tgccgagggg atcggcgata ccatacgctg ctccttgctg
 420

gctgatccgg tcgaggaagt caaggtgggt atcaagatcc tggagtcgct caacctacgt
 480
 cctcgaggtc tagagatcgt ctctgc
 507

<210> 2270
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 2270
 Leu Ser Asp Arg Val Asn Pro Gly Asn Ile Arg Lys Phe Asp Asp Gln
 1 5 10 15
 Ile Glu Ser Ile Cys Lys Ala Ala Thr Glu His Gly Thr Ser Ile Arg
 20 25 30
 Ile Gly Val Asn Ala Gly Ser Leu Asp Lys Arg Leu Leu Asp Lys Tyr
 35 40 45
 Gly Ala Pro Thr Ala Glu Ala Met Val Glu Ser Ala Leu Trp Glu Ala
 50 55 60
 Ser Leu Phe Glu Gln Tyr Gly Phe Arg Asp Phe Lys Ile Ser Val Lys
 65 70 75 80
 His His Asp Pro Val Val Met Ile Arg Ala Tyr Glu Gln Leu Ala Ala
 85 90 95
 Lys Cys Asp Tyr Pro Leu His Leu Gly Val Thr Glu Ala Gly Pro Ala
 100 105 110
 Phe Gln Gly Thr Ile Lys Ser Ala Val Ala Phe Gly His Leu Leu Ala
 115 120 125
 Glu Gly Ile Gly Asp Thr Ile Arg Val Ser Leu Ser Ala Asp Pro Val
 130 135 140
 Glu Glu Val Lys Val Gly Ile Lys Ile Leu Glu Ser Leu Asn Leu Arg
 145 150 155 160
 Pro Arg Gly Leu Glu Ile Val Ser Cys
 165

<210> 2271
 <211> 573
 <212> DNA
 <213> Homo sapiens

<400> 2271
 nncgccgacc cggacttcca ggagatgtta cgtgcgctgg tggacttcga cgaagacatc
 60
 ccgatggtcg acgaaagcct ggaacagttc gccagttgc tcaaaaccg cacctcgaa
 120
 gaaggcatgg cgccgttgac ctcgacgcg gtggcgcggt tggccactta cagcgcacgg
 180
 ctggcgggacc accaagggcg tgtgtccgcg cgcattggcg acttggtcca actggtcagc
 240
 gaggcggact ttatccgcca cctggcgggc gacgagatga ctgatgccg ccatatcgaa
 300
 cgggcgctca aggccaaggc cacgcgtacc gggcggtgat cggcgcgat tctcgacgac
 360
 atgctcgctg gggtcatect gatcgacacc gccggtgcgg ccgtgggcaa atgcaacggg
 420

ctgacgggtgc tggaagtcgg cgattcggcg ttcggcgtgc cggcgcggat ttccgccacg
 480
 gtgtacccgg gcggcagcgg cattgtcgac atcgagcgcg aagttaacct cggccagcgg
 540
 atccactcca agggcgtgat gatccttacc ggt
 573

<210> 2272
 <211> 191
 <212> PRT
 <213> Homo sapiens

<400> 2272
 Xaa Ala Asp Pro Asp Phe Gln Glu Met Leu Arg Ala Leu Val Asp Phe
 1 5 10 15
 Asp Glu Asp Ile Pro Met Val Asp Glu Ser Leu Glu Gln Phe Ala Gln
 20 25 30
 Leu Leu Lys Thr Arg Thr Ser Glu Glu Gly Met Ala Pro Leu Thr Ser
 35 40 45
 Asp Ala Val Ala Arg Leu Ala Thr Tyr Ser Ala Arg Leu Ala Asp His
 50 55 60
 Gln Gly Arg Val Ser Ala Arg Ile Gly Asp Leu Phe Gln Leu Val Ser
 65 70 75 80
 Glu Ala Asp Phe Ile Arg His Leu Ala Gly Asp Glu Met Thr Asp Ala
 85 90 95
 Gly His Ile Glu Arg Ala Leu Lys Ala Lys Ala Thr Arg Thr Gly Arg
 100 105 110
 Val Ser Ala Arg Ile Leu Asp Asp Met Leu Ala Gly Val Ile Leu Ile
 115 120 125
 Asp Thr Ala Gly Ala Ala Val Gly Lys Cys Asn Gly Leu Thr Val Leu
 130 135 140
 Glu Val Gly Asp Ser Ala Phe Gly Val Pro Ala Arg Ile Ser Ala Thr
 145 150 155 160
 Val Tyr Pro Gly Gly Ser Gly Ile Val Asp Ile Glu Arg Glu Val Asn
 165 170 175
 Leu Gly Gln Pro Ile His Ser Lys Gly Val Met Ile Leu Thr Gly
 180 185 190

<210> 2273
 <211> 4355
 <212> DNA
 <213> Homo sapiens

<400> 2273
 tctttccagc atgcctccgg cttcttgggg gaacacagtc ccggtggtca gaggtcctgc
 60
 aggggaggcc tctctctgga acgcctaccc aactccatcg cctcccgtt ccgcctgaca
 120
 gagaggagg aggaagtgat cacctgtttt gagaggcct cctggatcgc tcaggtgttc
 180
 ctgcaggaat tggagaagac cacaaataac agcacgtcga ggcattctgaa aggtgtcac
 240
 ccgcttgact atgagctcac ctacttctcg gaagctgcc tccagagcgc ctatgtgaaa
 300

aacctgaaga aggggaacat cgtgaagggc atgagagagc tccgggaggt gctgcggact
360
gtggagacca aagcaactca gaacttcaaa gtgatggcgg ccaagcacct ggcgggggtc
420
ctgctgcact ccctgagtgg agtgctactg gagccccctg tcccaccctc tgcttgagtt
480
atgggcaagg aggagagttc tttcgccact caggccctgc ggaaacctca cctctatgaa
540
ggagacaacc tctactgccc caaggacaac atcgaggaag ccctcctgct cctcctcatc
600
agcgaatcca tggcaactcg agatgtgggtg ctgagccggg tgccggagca ggaggaggac
660
cggacagtga gcttgacagaa tgccgcagcc atctatgacc tcttgagcat cactgtgggc
720
agaaggggac agtacgtcat gctctcggag tgcttgagc gagccatgaa gtttgcttt
780
ggagaatttc accttggtg ccaggtggcc ctctccatgg tggcttgtgg gaagtcagcc
840
tacgtgtgt ccctgctcgg ggagtgtgtg aagttgcggc cctcggaccc caccgtgccc
900
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<211> 158

<212> PRT

<213> Homo sapiens

<400> 2274

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Cys	Phe	Glu	Arg	Ala	Ser	Trp	Ile	Ala	Gln	Val	Phe	Leu	Gln	Glu	Leu
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Ala	Tyr	Val	Lys	Asn	Leu	Lys	Lys	Gly	Asn	Ile	Val	Lys	Gly	Met	Arg
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Glu	Leu	Arg	Glu	Val	Leu	Arg	Thr	Val	Glu	Thr	Lys	Ala	Thr	Gln	Asn
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Phe	Lys	Val	Met	Ala	Ala	Lys	His	Leu	Ala	Gly	Val	Leu	Leu	His	Ser
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150

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<211> 608

<212> DNA

<213> Homo sapiens

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<210> 2276

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2276

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35 40 45
Lys Pro Ser Val Ser Ala Phe Thr His Ser Pro Pro Glu Asn Thr Thr
50 55 60
Gly Ile Ser Ser Thr Ile Ser Phe His Ser Arg Thr Leu Asn Leu Thr
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Asp Val Ile Glu Glu Leu Ala Gln Ala Ser Thr Gln Thr Leu Lys Ser
85 90 95
Thr Ile Ala Ser Glu Thr Thr Leu Ser Ser Lys Ser His Gln Ser Thr
100 105 110
Thr Thr Arg Lys Ala Ile Ile Arg His Ser Thr Ile Pro Pro Phe Leu
115 120 125
Ser Ser Ser Ala Thr Leu Ile Pro Val Pro Ile Ser Pro Pro Phe Thr

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 Ser Leu Leu Ser Pro Tyr Pro Val Leu Pro Ser Pro Ser Cys Lys Val
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 Pro Ala Val Leu Phe Ser Phe Leu His Cys Ala Phe Val Ser Phe Leu
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 35 40 45
 Asn Phe Gln Glu Gly Gly Gln Leu Ala Ser Ala Ala Pro Asp Leu Trp
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<210> 2284
 <211> 122
 <212> PRT
 <213> Homo sapiens

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      50                55                60
Val Leu Arg Asn Arg Leu Gln Pro Cys His Arg Ser Ser Gln Leu His
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Gln Ala Phe Gly Arg Ala Val Ile Arg Leu Pro Ala Lys Ala Gln Ala
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<210> 2286

<211> 1784

<212> PRT

<213> Homo sapiens

<400> 2286

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			20					25					30		
Pro	Gly	Pro	Ala	Pro	Gly	Arg	Ala	Thr	Glu	Gly	Arg	Ala	Ala	Leu	Asp
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Ile	Val	His	Pro	Val	Arg	Val	Asp	Ala	Gly	Gly	Ser	Phe	Leu	Ser	Tyr
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Glu	Leu	Trp	Pro	Arg	Ala	Leu	Arg	Lys	Arg	Asp	Val	Ser	Val	Arg	Arg
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Asp	Ala	Pro	Ala	Phe	Tyr	Glu	Leu	Gln	Tyr	Arg	Gly	Arg	Glu	Leu	Arg
				85					90				95		
Phe	Asn	Leu	Thr	Ala	Asn	Gln	His	Leu	Leu	Ala	Pro	Gly	Phe	Val	Ser
			100					105					110		
Glu	Thr	Arg	Arg	Arg	Gly	Gly	Leu	Gly	Arg	Ala	His	Ile	Arg	Ala	His
			115				120					125			
Thr	Pro	Ala	Cys	His	Leu	Leu	Gly	Glu	Val	Gln	Asp	Pro	Glu	Leu	Glu
			130			135					140				
Gly	Gly	Leu	Ala	Ala	Ile	Ser	Ala	Cys	Asp	Gly	Leu	Lys	Gly	Val	Phe
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Gln	Leu	Ser	Asn	Glu	Asp	Tyr	Phe	Ile	Glu	Pro	Leu	Asp	Ser	Ala	Pro
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Ala	Arg	Pro	Gly	His	Ala	Gln	Pro	His	Val	Val	Tyr	Lys	Arg	Gln	Ala
			180				185						190		
Pro	Glu	Arg	Leu	Ala	Gln	Arg	Gly	Asp	Ser	Ser	Ala	Pro	Ser	Thr	Cys

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Ser Ala Ser Val Pro Arg	Ala Gly Val Ser Thr	Gly Ala Leu Gly Ala
210	215	220
Ala Ala Ala Val Ala Ala	Ala Thr Ala Arg Arg	Leu His Gln Arg Ser
225	230	235
Val Ser Lys Glu Lys Trp	Val Glu Thr Leu Val	Val Ala Asp Ala Lys
245	250	255
Met Val Glu Tyr His Gly	Gln Pro Gln Val Glu	Ser Tyr Val Leu Thr
260	265	270
Ile Met Asn Met Val Ala	Gly Leu Phe His Asp	Pro Ser Ile Gly Asn
275	280	285
Pro Ile His Ile Thr Ile	Val Arg Leu Val Leu	Leu Glu Asp Glu Glu
290	295	300
Glu Asp Leu Lys Ile Thr	His His Ala Asp Asn	Thr Leu Lys Ser Phe
305	310	315
Cys Lys Trp Gln Lys Ser	Ile Asn Met Lys Gly	Asp Ala His Pro Leu
325	330	335
His His Asp Thr Ala Ile	Leu Leu Thr Arg Lys	Asp Leu Cys Ala Ala
340	345	350
Met Asn Arg Pro Cys Glu	Thr Leu Gly Leu Ser	His Val Ala Gly Met
355	360	365
Cys Gln Pro His Arg Ser	Cys Ser Ile Asn Glu	Asp Thr Gly Leu Pro
370	375	380
Leu Ala Phe Thr Val Ala	His Glu Leu Gly His	Ser Phe Gly Ile Gln
385	390	395
His Asp Gly Ser Gly Asn	Asp Cys Glu Pro Val	Gly Lys Arg Pro Phe
405	410	415
Ile Met Ser Pro Gln Leu	Leu Tyr Asp Ala Ala	Pro Leu Thr Trp Ser
420	425	430
Arg Cys Ser Arg Gln Tyr	Ile Thr Arg Phe Leu	Asp Arg Gly Trp Gly
435	440	445
Leu Cys Leu Asp Asp Pro	Pro Ala Lys Asp Ile	Ile Asp Phe Pro Ser
450	455	460
Val Pro Pro Gly Val Leu	Tyr Asp Val Ser His	Gln Cys Arg Leu Gln
465	470	475
Tyr Gly Ala Tyr Ser Ala	Phe Cys Glu Asp Met	Asp Asn Val Cys His
485	490	495
Thr Leu Trp Cys Ser Val	Gly Thr Thr Cys His	Ser Lys Leu Asp Ala
500	505	510
Ala Val Asp Gly Thr Arg	Cys Gly Glu Asn Lys	Trp Cys Leu Ser Gly
515	520	525
Glu Cys Val Pro Val Gly	Phe Arg Pro Glu Ala	Val Asp Gly Gly Trp
530	535	540
Ser Gly Trp Ser Ala Trp	Ser Ile Cys Ser Arg	Ser Cys Gly Met Gly
545	550	555
Val Gln Ser Ala Glu Arg	Gln Cys Thr Gln Pro	Thr Pro Lys Tyr Lys
565	570	575
Gly Arg Tyr Cys Val Gly	Glu Arg Lys Arg Phe	Arg Leu Cys Asn Leu
580	585	590
Gln Ala Cys Pro Ala Gly	Arg Pro Ser Phe Arg	His Val Gln Cys Ser
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His Phe Asp Ala Met Leu	Tyr Lys Gly Gln Leu	His Thr Trp Val Pro
610	615	620
Val Val Asn Asp Val Asn	Pro Cys Glu Leu His	Cys Arg Pro Ala Asn

625	630														635				640
Glu Tyr Phe Ala Lys Lys Leu Arg Asp Ala Val Val Asp Gly Thr Pro																			645
	645														650				655
Cys Tyr Gln Val Arg Ala Ser Arg Asp Leu Cys Ile Asn Gly Ile Cys																			660
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Lys Asn Val Gly Cys Asp Phe Glu Ile Asp Ser Gly Ala Met Glu Asp																			675
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Arg Cys Gly Val Cys His Gly Asn Gly Ser Thr Cys His Thr Val Ser																			690
	690														695				700
Gly Thr Phe Xaa Arg Arg Pro Arg Val Xaa Gly Tyr Val Asp Val Gly																			705
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Leu Ile Pro Ala Gly Ala Arg Glu Ile Arg Ile Gln Glu Val Ala Glu																			720
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Ala Ala Asn Phe Leu Ala Leu Arg Ser Glu Asp Pro Glu Lys Tyr Phe																			735
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Leu Asn Gly Gly Trp Thr Ile Gln Trp Asn Gly Asp Tyr Gln Val Ala																			750
	750														755				760
Gly Thr Thr Phe Thr Tyr Ala Arg Arg Gly Asn Trp Glu Asn Leu Thr																			765
	765														770				775
Ser Pro Gly Pro Thr Lys Lys Glu Pro Val Trp Ile Gln Val Pro Ala Ser																			780
	780														785				790
Arg Gly Pro Gly Gly Ser Arg Gly Gly Val Pro Arg Pro Ser Thr																			800
	800														805				810
Leu His Gly Arg Ser Arg Pro Gly Gly Val Ser Pro Gly Ser Val Thr																			815
	815														820				825
Glu Pro Gly Ser Glu Pro Gly Pro Pro Ala Ala Ala Ser Thr Ser Val																			830
	830														835				840
Ser Pro Ser Leu Lys Trp Pro Asn Leu Val Ala Val His Arg Gly																			845
	845														850				855
Gly Trp Gly Gln Ala Pro Leu Gly Leu Gly Gly Trp Arg Arg His Leu																			860
	860														865				870
Val Leu Met Gly Pro Arg Leu Pro Thr Gln Leu Leu Phe Gln Glu Ser																			875
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Asn Pro Gly Val His Tyr Glu Tyr Thr Ile His Arg Glu Ala Gly Gly																			890
	890														900				905
His Asp Glu Val Pro Pro Pro Val Phe Ser Trp His Tyr Gly Pro Trp																			910
	910														915				920
Thr Lys Cys Thr Val Thr Cys Gly Arg Gly Val Gln Arg Gln Asn Val																			925
	925														930				935
Tyr Cys Leu Glu Arg Gln Ala Gly Pro Val Asp Glu Glu His Cys Asp																			940
	940														945				950
Pro Leu Gly Arg Pro Asp Asp Gln Gln Arg Lys Cys Ser Glu Gln Pro																			955
	955														960				965
Cys Pro Ala Arg Trp Trp Ala Gly Glu Trp Gln Leu Cys Ser Ser Ser																			970
	970														975				980
Cys Gly Pro Gly Gly Leu Ser Arg Arg Ala Val Leu Cys Ile Arg Ser																			985
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Val Gly Leu Asp Glu Gln Ser Ala Leu Glu Pro Pro Ala Cys Glu His																			1000
	1000														1005				1010
Leu Pro Arg Pro Pro Thr Glu Thr Pro Cys Asn Arg His Val Pro Cys																			1015
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Pro Ala Thr Trp Ala Val Gly Asn Trp Ser Gln Cys Ser Val Thr Cys																			1030
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Gly Glu Gly Thr Gln Arg Arg Asn Val Leu Cys Thr Asn Asp Thr Gly																			1045
	1045														1050				1055

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Val Pro Cys Asp Glu Ala Gln Gln Pro Ala Ser Glu Val Thr Cys Ser		
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Leu Pro Leu Cys Arg Trp Pro Leu Gly Thr Leu Gly Pro Glu Gly Ser		
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Gly Ser Gly Ser Ser Ser His Glu Leu Phe Asn Glu Ala Asp Phe Ile		
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Pro His His Leu Ala Pro Arg Pro Ser Pro Ala Ser Ser Pro Lys Pro		
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Gly Thr Met Gly Asn Ala Ile Glu Glu Glu Ala Pro Glu Leu Asp Leu		
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Pro Gly Pro Val Phe Val Asp Asp Phe Tyr Tyr Asp Tyr Asn Phe Ile		
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1170	1175	1180
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Ala Lys Glu Glu Gly Val Leu Gly Pro Trp Ser Pro Ser Pro Trp Pro		
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Ser Gln Ala Gly Arg Ser Pro Pro Pro Pro Ser Glu Gln Thr Pro Gly		
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Asn Pro Leu Ile Asn Phe Leu Pro Glu Glu Asp Thr Pro Ile Gly Ala		
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Pro Asp Leu Gly Leu Pro Ser Leu Ser Trp Pro Arg Val Ser Thr Asp		
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Gly Leu Gln Thr Pro Ala Thr Pro Glu Ser Gln Asn Asp Phe Pro Val		
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Gly Lys Asp Ser Gln Ser Gln Leu Pro Pro Pro Trp Arg Asp Arg Thr		
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Asn Glu Val Phe Lys Asp Asp Glu Glu Pro Lys Gly Arg Gly Ala Pro		
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His Leu Pro Pro Arg Pro Ser Ser Thr Leu Pro Pro Leu Ser Pro Val		
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Gly Ser Thr His Ser Ser Pro Ser Pro Asp Val Ala Glu Leu Trp Thr		
1345	1350	1355
Gly Gly Thr Val Ala Trp Glu Pro Ala Leu Glu Gly Gly Leu Gly Pro		
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Val Asp Ser Glu Leu Trp Pro Thr Val Gly Val Ala Ser Leu Leu Pro		
1380	1385	1390
Pro Pro Ile Ala Pro Leu Pro Glu Met Lys Val Arg Asp Ser Ser Leu		
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Glu Pro Gly Thr Pro Ser Phe Pro Ala Pro Gly Pro Gly Ser Trp Asp		
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Leu Gln Thr Val Ala Val Trp Gly Thr Phe Leu Pro Thr Thr Leu Thr		
1425	1430	1435
Gly Leu Gly His Met Pro Glu Pro Ala Leu Asn Pro Gly Pro Lys Gly		
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Gln Pro Glu Ser Leu Ser Pro Glu Val Pro Leu Ser Ser Arg Leu Leu		
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Ser Thr Pro Ala Trp Asp Ser Pro Ala Asn Ser His Arg Val Pro Glu		
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Thr Gln Pro Leu Ala Pro Ser Leu Ala Glu Ala Gly Pro Pro Ala Asp		

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 Cys Ser Thr Thr Cys Gly Leu Gly Ala Val Trp Arg Pro Val Arg Cys
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 1570 1575 1580
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 Cys Gln Pro Gly Pro Ala Lys Pro Pro Ala His Arg Pro Cys Gly Ala
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 Gln Pro Cys Leu Ser Trp Tyr Thr Ser Ser Trp Arg Glu Cys Ser Glu
 1620 1625 1630
 Ala Cys Gly Gly Gly Glu Gln Gln Arg Leu Val Thr Cys Pro Glu Pro
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 Val Glu Pro Pro Arg Cys Glu Arg Asp Arg Leu Ser Phe Gly Phe Cys
 1730 1735 1740
 Glu Thr Leu Arg Leu Leu Gly Arg Cys Gln Leu Pro Thr Ile Arg Thr
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 Gly His Gln Arg Val Ala Arg Arg
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<210> 2287

<211> 750

<212> DNA

<213> Homo sapiens

<400> 2287

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 180
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 300

gaggggtcca tgggagccca gaggggagca tctgaccagg ctgaggggaa ggaatgtgtc
 360
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 420
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 600
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<210> 2288
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 2288
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 20 25 30
 Ile Phe Leu Tyr Gly Pro Cys Ser Ser Gln Pro Leu Ile Leu Glu Leu
 35 40 45
 Gly Thr Gly Ser Ala Thr Ser Met Leu Leu Ser Cys Cys Ser Pro Ala
 50 55 60
 Trp Asn Val Pro Tyr Leu Ala Asn Ser Tyr Cys Ser Ser Val Thr Leu
 65 70 75 80
 Leu Asp Thr Phe Leu Pro Leu Ser Leu Val Arg Cys Ser Pro Leu Gly
 85 90 95
 Ser His Gly Pro Leu Cys Val Pro Val Val Ala Gln Gln Lys Pro Pro
 100 105 110
 Ala Asp Gly Trp Val Ser Cys Pro Glu His Gly Ser Leu Arg Ala Glu
 115 120 125
 Ser Thr Trp Leu Ser Gly Gly Ala Gln Ser His Trp Leu His
 130 135 140

<210> 2289
 <211> 381
 <212> DNA
 <213> Homo sapiens

<400> 2289
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 gtgctgcaca agttctcggg ctacgggcag ctgtgcgagc gcggcctgga ggagctcatc
 180

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 240
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<210> 2290

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2290

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		20					25					30			
Ile	Asp	Tyr	Thr	Gly	Gly	Leu	Lys	His	Gln	Ile	Leu	Gln	Ser	His	Gly
		35				40					45				
Gln	Asp	Ala	Glu	Leu	Ser	Gly	Thr	Leu	Ser	Leu	Val	Leu	Thr	Gln	Gly
	50					55				60					
Cys	Lys	Arg	Ile	Xaa	Arg	Gly	Tyr	Trp	Phe	Lys	Asn	Trp	Pro	Pro	Thr
65					70				75					80	
Thr	Lys	Thr	Ser	Thr	Ala	Val	Phe	Leu	Gly	Leu	Glu	Lys	Pro	Leu	Met
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Arg	Ile	His	Phe												
			100												

<210> 2291

<211> 573

<212> DNA

<213> Homo sapiens

<400> 2291

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 120
 aagtggtcga tagaagcccc agccggctta agccagttct ggaaaaccac cacatatcgc
 180
 acatgttcgt tgtgacgatg cagctgagcc attgaatcga cggtcagcgc catgaacgcc
 240
 cgatgctcgt tgacggtaag actcgccgac ccagcaacgt cggcggttgt cgtgccctca
 300
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 360
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 420
 aacttggcgt taaggaccga cctcacgtga gcctccctg acgggttaga caggatttcc
 480
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cacgacagga tctcgaaaag attggggacg cgt
573

<210> 2292

<211> 140

<212> PRT

<213> Homo sapiens

<400> 2292

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      20             25             30
Lys Ala Val Gly Ser Asp Arg Arg Ala Glu Asp Leu Gly Pro Gln Glu
      35             40             45
Leu Arg Glu Ala Ser Ala Ala Phe Phe Ala Gly Gly His Asp Val Ile
      50             55             60
Val Ala Arg Arg His Tyr Thr Asp Glu Gly Thr Thr Thr Ala Asp Val
      65             70             75             80
Ala Gly Ser Ala Ser Leu Thr Val Asn Glu His Arg Ala Phe Met Ala
      85             90             95
Leu Thr Val Asp Ser Met Ala Gln Leu His Arg His Asn Glu His Val
      100            105            110
Arg Tyr Val Val Val Phe Gln Asn Trp Leu Lys Pro Ala Gly Ala Ser
      115            120            125
Ile Asp His Leu His Lys Gln Val Val Ala Ile Asp
      130            135            140

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<210> 2293

<211> 358

<212> DNA

<213> Homo sapiens

<400> 2293

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120
gaggagatca agcggcagtt ccaaggtctg cattgggttg gacgtaagta tgggctcaac
180
cacggagagt tctatcttga cgacgagcag tgggccacgc tcatggccgg gtcctctttc
240
gaggcgaatc cgcgcatata gagcaacttt gattccgagg gcgctgttgt ggatccggat
300
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358

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<210> 2294

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2294

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Met Glu Ala Ala Leu Val Gly Ala His Lys Thr Gly Gly Cys Pro Leu

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Val Asn Thr Val Ala Lys Asn Trp Leu Asn Arg Leu Asn Thr Pro Asp
      20           25           30
Met Lys Pro Thr Glu Glu Ile Lys Arg Gln Phe Gln Gly Leu His Trp
      35           40           45
Leu Gly Arg Lys Tyr Gly Leu Asn His Gly Glu Phe Tyr Leu Asp Asp
      50           55           60
Glu Gln Trp Ala Thr Leu Met Ala Gly Ser Ser Phe Glu Ala Asn Pro
      65           70           75           80
Arg Ile Lys Ser Asn Phe Asp Ser Glu Gly Ala Val Val Asp Pro Asp
      85           90           95
Ser Asp Ser Leu Ala Gly Ala Asp Arg Asp Ala Arg Gly Ala Ser Asp
      100           105           110
Ala Cys Leu
      115

```

<210> 2295

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2295

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ggcaccgatac cgagtggtagg tgccgggatt aggnccgatac tanaaacatt ctccgccctt
60
ggggcgtagtg gctgctcggg cattaccgca ctggtagcgc aaaatacgcg cggcgtagcag
120
tcgggtgatac gtatcgaacc ggattttgtc ggtgcacaac tggactctgt gttagcgat
180
gtccgcattg attccaccaa aatcggcatg ctggcagagg cggatatcgt ggaagcggtc
240
gcggagcgcc tcaaacatta tcgcgttaaa aacgtggtac ttgatacggg gatgctggcg
300
aaaagtggcg atccgctgct atctcctgct gctgtcgaaa ctctgcgaaa acaccttctg
360
ccacacgtcg cgctgatcac gccaaatttg ccggaggcgg cggcgctgct ggatgcgcct
420
catgcccgtg ccgagcacga gatgaaagag caggggacgc cacttctggc gcttggctgc
480
gaggcagtgc tgatgaaagg cggccatctt gacgatcctg agagcccgga ctggctcttc
540
acgcgt
546

```

<210> 2296

<211> 182

<212> PRT

<213> Homo sapiens

<400> 2296

```

Gly Thr Asp Pro Ser Gly Gly Ala Gly Ile Arg Xaa Asp Leu Xaa Thr
1           5           10           15
Phe Ser Ala Leu Gly Ala Tyr Gly Cys Ser Val Ile Thr Ala Leu Val
      20           25           30
Ala Gln Asn Thr Arg Gly Val Gln Ser Val Tyr Arg Ile Glu Pro Asp

```

```

      35          40          45
Phe Val Gly Ala Gln Leu Asp Ser Val Phe Ser Asp Val Arg Ile Asp
      50          55          60
Ser Thr Lys Ile Gly Met Leu Ala Glu Ala Asp Ile Val Glu Ala Val
      65          70          75          80
Ala Glu Arg Leu Lys His Tyr Arg Val Lys Asn Val Val Leu Asp Thr
      85          90          95
Val Met Leu Ala Lys Ser Gly Asp Pro Leu Leu Ser Pro Ala Ala Val
      100          105          110
Glu Thr Leu Arg Lys His Leu Leu Pro His Val Ala Leu Ile Thr Pro
      115          120          125
Asn Leu Pro Glu Ala Ala Ala Leu Leu Asp Ala Pro His Ala Arg Thr
      130          135          140
Glu His Glu Met Lys Glu Gln Gly Arg Ala Leu Leu Ala Leu Gly Cys
      145          150          155          160
Glu Ala Val Leu Met Lys Gly Gly His Leu Asp Asp Pro Glu Ser Pro
      165          170          175
Asp Trp Leu Phe Thr Arg
      180

```

<210> 2297
 <211> 414
 <212> DNA
 <213> Homo sapiens

```

<400> 2297
gggaattccg ggcccttccc cccaagcccg ggtaattttt tgtattttta aaaaaaagg
60
gaattttccc acgttggggg ggggggggttc ggactttttc ccccaaaaac ccccccccc
120
caccctccca aaggccgaaa agcagggcca aaaccccccg gacccccccc ggggggggca
180
aaaggaaaaa cccctttttt tttttttttt ttttatacac atgaggttct ctggttaata
240
aatgttgaga tgtaggggta ggtgagatta aacaggttct ttttttcattg atttctcgga
300
gtctttatga tgctccacac cagtacttct caaagctgac tgtgtataca aaacactggg
360
gatctgaccc acatgtaaag tctgatttct ttgggtctggg gcaggcctga aatn
414

```

<210> 2298
 <211> 67
 <212> PRT
 <213> Homo sapiens

```

<400> 2298
Lys Lys Arg Glu Phe Ser His Val Gly Gly Gly Gly Phe Gly Leu Phe
1      5      10      15
Pro Pro Lys Thr Pro Pro Pro His Pro Pro Lys Gly Arg Lys Ala Gly
20     25     30
Pro Lys Pro Pro Gly Pro Pro Pro Gly Gly Ala Lys Gly Lys Thr Pro
35     40     45
Phe Phe Phe Phe Phe Phe Tyr Thr His Glu Gly Leu Trp Leu Ile Asn

```

50
Val Glu Met
65

55

60

<210> 2299
<211> 987
<212> DNA
<213> Homo sapiens

<400> 2299
ngagatgtct aagttatttt ttttttcccg gaaggcaaat ggctggcgtg gaagcacaac
60
ccgctttcac tcttcgaatt tgtgcttagc tcttttcttg taccctgcca ctctgacca
120
acatgctgtg atgtgtgccg agggaggaat tggtcagcta cacaacctgg atcttaccac
180
agtttgata tgactgaggc tctccaatgg gccagatata actggcgacg gctgatcaga
240
ggcgcaacca gggatgatga ttcagggcca tacaactatt cctcgttgct cgctgtggg
300
cgcaagtcct ctcagatccc taaactgtca ggaaggcacc ggattgttgt tccccacatc
360
cagcccttca aggatgagta tgagaagtgc tccggagcct atgtgaacaa tcgaatacga
420
acaacaaagt acacacttct gaattttgtg ccaagaaatt tatttgaaca atttcacaga
480
gctgccaatt tatatttcct gttcctagtt gtctgaact gggtagcctt ggtagaagcc
540
ttccaaaagg aaatcacat gttgcctctg gtgggtgtcc ttacaattat cgcaattaaa
600
gatggcctgg aagattatcg gaaatacaaa attgacaaac agatcaataa tttataaact
660
aaagtttata gtaggaaaga gaaaaaatac attgaccgat gctggaaaga cgttactgtt
720
ggggacttta ttgcctctc ctgcaacgag gtcacccctg cagacatggt actactcttt
780
tccactgac cagatggaat ctgtcacatt gagacttctg gtcttgatgg agagagcaat
840
ttaaacaga ggcaggtggt tcggggatat gcagaacagg actctgaagt tgatcctgag
900
aagttttcca gtaggataga atgtgaaagc ccaacaatg acctcagcag attccgaggc
960
ttcctagaac attccaacaa agaacgc
987

<210> 2300
<211> 266
<212> PRT
<213> Homo sapiens

<400> 2300
Met Thr Glu Ala Leu Gln Trp Ala Arg Tyr His Trp Arg Arg Leu Ile
1 5 10 15
Arg Gly Ala Thr Arg Asp Asp Ser Gly Pro Tyr Asn Tyr Ser Ser

20 25 30
 Leu Leu Ala Cys Gly Arg Lys Ser Ser Gln Ile Pro Lys Leu Ser Gly
 35 40 45
 Arg His Arg Ile Val Val Pro His Ile Gln Pro Phe Lys Asp Glu Tyr
 50 55 60
 Glu Lys Phe Ser Gly Ala Tyr Val Asn Asn Arg Ile Arg Thr Thr Lys
 65 70 75 80
 Tyr Thr Leu Leu Asn Phe Val Pro Arg Asn Leu Phe Glu Gln Phe His
 85 90 95
 Arg Ala Ala Asn Leu Tyr Phe Leu Phe Leu Val Val Leu Asn Trp Val
 100 105 110
 Pro Leu Val Glu Ala Phe Gln Lys Glu Ile Thr Met Leu Pro Leu Val
 115 120 125
 Val Val Leu Thr Ile Ile Ala Ile Lys Asp Gly Leu Glu Asp Tyr Arg
 130 135 140
 Lys Tyr Lys Ile Asp Lys Gln Ile Asn Asn Leu Ile Thr Lys Val Tyr
 145 150 155 160
 Ser Arg Lys Glu Lys Lys Tyr Ile Asp Arg Cys Trp Lys Asp Val Thr
 165 170 175
 Val Gly Asp Phe Ile Arg Leu Ser Cys Asn Glu Val Ile Pro Ala Asp
 180 185 190
 Met Val Leu Leu Phe Ser Thr Asp Pro Asp Gly Ile Cys His Ile Glu
 195 200 205
 Thr Ser Gly Leu Asp Gly Glu Ser Asn Leu Lys Gln Arg Gln Val Val
 210 215 220
 Arg Gly Tyr Ala Glu Gln Asp Ser Glu Val Asp Pro Glu Lys Phe Ser
 225 230 235 240
 Ser Arg Ile Glu Cys Glu Ser Pro Asn Asn Asp Leu Ser Arg Phe Arg
 245 250 255
 Gly Phe Leu Glu His Ser Asn Lys Glu Arg
 260 265

<210> 2301

<211> 390

<212> DNA

<213> Homo sapiens

<400> 2301

tatcccaagc gcttcaaatt tgatgccgat gagttctact tgaaatcgtc cgaggaaatg
 60
 nncgccacct cttccgcgna tttccctgaa gcttgcgata acactatgga aatcgctgag
 120
 nncgttgcca cgttgaattc aacacaaacg caanactaca tgcccgatatt cccacccccg
 180
 gagggggaga atgaggaatc ctgggttcgtc aaagaagttg aacgcggttt gcactaccga
 240
 ttccccgagg gcattccccga tgacgtacgc aagcaggcag attatgaagt agggattatt
 300
 acccagatgg gattccccgg ctacttcttg gtggtcgcgg attttatcaa ctgggcgaag
 360
 aataacggaa ttcgagtggg ccccgggcgt
 390

<210> 2302

<211> 130
 <212> PRT
 <213> Homo sapiens

<400> 2302
 Tyr Pro Lys Arg Phe Lys Phe Asp Ala Asp Glu Phe Tyr Leu Lys Ser
 1 5 10 15
 Ser Glu Glu Met Xaa Ala Thr Ser Ser Ala Xaa Phe Pro Glu Ala Cys
 20 25 30
 Asp Asn Thr Met Glu Ile Ala Glu Xaa Val Ala Thr Leu Asn Ser Thr
 35 40 45
 Gln Thr Gln Xaa Tyr Met Pro Asp Phe Pro Thr Pro Glu Gly Glu Asn
 50 55 60
 Glu Glu Ser Trp Phe Val Lys Glu Val Glu Arg Gly Leu His Tyr Arg
 65 70 75 80
 Phe Pro Glu Gly Ile Pro Asp Asp Val Arg Lys Gln Ala Asp Tyr Glu
 85 90 95
 Val Gly Ile Ile Thr Gln Met Gly Phe Pro Gly Tyr Phe Leu Val Val
 100 105 110
 Ala Asp Phe Ile Asn Trp Ala Lys Asn Asn Gly Ile Arg Val Gly Pro
 115 120 125
 Gly Arg
 130

<210> 2303
 <211> 638
 <212> DNA
 <213> Homo sapiens

<400> 2303
 nnggatccag gctgcccttg tgtgtctcct tcagtcttcg ttagctgcct gctgctgtct
 60
 gcacctgtgt ttggctacct gggcgaccga catagccgca aggctaccat gagcttcggt
 120
 atcttctgtt gggtcaggagc tggcctctct agctccttca tctccccccg gtattcttgg
 180
 ctcttcttcc tgtccccggg catcgagggc actgggtcgg ccagctactc caccatcgcg
 240
 cccaccgtcc tgggagacct ctctgtgagg gaccagcgca cccgctgtct ggctgtcttc
 300
 tacatcttta tccccgttgg aagtggctctg ggctacgtgc tggggtcggc tgtgacgatg
 360
 ctgactggga actggcgctg ggcctccga gtcatgcct gcctggaggc cgtggccttg
 420
 atcctgctta tctgtctggt tccagacca ccccgaggag ctgccgagac acagggggag
 480
 ggggcccgtg gaggtctcag aagcagctgg tgtgaggacg tcagatacct ggggaaaaac
 540
 tggagttttg tgtggtcgac cctcgagtg accgccatgg cctttgtgac tggagccctg
 600
 gggttctggg cccccaagtt tctgctcgag gcacgcgt
 638

<210> 2304

<211> 212
 <212> PRT
 <213> Homo sapiens

<400> 2304
 Xaa Asp Pro Gly Cys Pro Cys Val Ser Pro Ser Val Phe Val Ser Cys
 1 5 10 15
 Leu Leu Leu Ser Ala Pro Val Phe Gly Tyr Leu Gly Asp Arg His Ser
 20 25 30
 Arg Lys Ala Thr Met Ser Phe Gly Ile Leu Leu Trp Ser Gly Ala Gly
 35 40 45
 Leu Ser Ser Ser Phe Ile Ser Pro Arg Tyr Ser Trp Leu Phe Phe Leu
 50 55 60
 Ser Arg Gly Ile Glu Gly Thr Gly Ser Ala Ser Tyr Ser Thr Ile Ala
 65 70 75 80
 Pro Thr Val Leu Gly Asp Leu Phe Val Arg Asp Gln Arg Thr Arg Val
 85 90 95
 Leu Ala Val Phe Tyr Ile Phe Ile Pro Val Gly Ser Gly Leu Gly Tyr
 100 105 110
 Val Leu Gly Ser Ala Val Thr Met Leu Thr Gly Asn Trp Arg Trp Ala
 115 120 125
 Leu Arg Val Met Pro Cys Leu Glu Ala Val Ala Leu Ile Leu Leu Ile
 130 135 140
 Leu Leu Val Pro Asp Pro Pro Arg Gly Ala Ala Glu Thr Gln Gly Glu
 145 150 155 160
 Gly Ala Val Gly Gly Phe Arg Ser Ser Trp Cys Glu Asp Val Arg Tyr
 165 170 175
 Leu Gly Lys Asn Trp Ser Phe Val Trp Ser Thr Leu Gly Val Thr Ala
 180 185 190
 Met Ala Phe Val Thr Gly Ala Leu Gly Phe Trp Ala Pro Lys Phe Leu
 195 200 205
 Leu Glu Ala Arg
 210

<210> 2305
 <211> 340
 <212> DNA
 <213> Homo sapiens

<400> 2305
 gccccgcct ctatcttccg gcatcgctcac agtcgcatcg tgacgggtact ggctggagtc
 60
 tcggaccagc acactttgac cgctcgtggtc gcctcgtgac atggggtaac gcgaacctcg
 120
 tcgctcctgt tcttgacctc ttccgtgccc ccattgacaa cgatcgggca agttcactgg
 180
 cccgcaacgc tattggtgac gcagcactcg cagctggtct cgaccgactc gtccacacca
 240
 cggcgtcggg gcgcgacgag ggcgatgagt tggctcgtcgt tactcgcagc gctgctgccg
 300
 ccgcacgcaa ttccatgacg acaacgtgga gttggcgcg
 340

<210> 2306

<211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2306
 Met Glu Leu Arg Ala Ala Ala Ala Ala Leu Arg Val Thr Thr Thr Asn
 1 5 10 15
 Ser Ser Pro Ser Ser Arg Thr Asp Ala Val Val Trp Thr Ser Arg Ser
 20 25 30
 Arg Pro Ala Ala Ser Ala Ala Ser Pro Ile Ala Leu Arg Ala Ser Glu
 35 40 45
 Leu Ala Arg Ser Leu Ser Met Gly Ala Arg Lys Arg Ser Arg Thr Gly
 50 55 60
 Ala Thr Arg Phe Ala Leu Pro His Val Thr Arg Arg Pro Arg Arg Ser
 65 70 75 80
 Lys Cys Ala Gly Pro Arg Leu Gln Pro Val Pro Ser Arg Cys Asp Cys
 85 90 95
 Asp Asp Ala Gly Arg
 100

<210> 2307
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 2307
 ngcttctcag ctgaaggggg agataaagct ctacataaga tgggtccagg tgggggcaaa
 60
 gccaaaggcac tgggtggggc tggcagtggg agcaagggtc cagcaggtgg cggaagcaag
 120
 cgacggctga gcagcgaaga cagctccctg gagccagacc tggccgagat gagcctggat
 180
 gacagcagcc tggccctggg cgcagaggcc aggaccttcg ggggattccc tgagagccct
 240
 ccaccctgtc ctctccacgg tggctcccga ggcccttcca ctttccttcc tgagccccc
 300
 gatacttatg aagaagatgg tgatgagagt ggcaatgggc ttcccaaac caaagaggca
 360

<210> 2308
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 2308
 Xaa Phe Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro
 1 5 10 15
 Gly Gly Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys
 20 25 30
 Gly Ser Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser
 35 40 45
 Ser Leu Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu
 50 55 60
 Ala Leu Gly Ala Glu Ala Arg Thr Phe Gly Gly Phe Pro Glu Ser Pro


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<210> 2311
<211> 378
<212> DNA
<213> Homo sapiens
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<400> 2311

gtgcacgccg agatgctgcc gcaagacaag cagcgtgtcg tcggcgagtt gaagcgccag
 60
 ggctttctcag tgatcaaggt cggcgatggc atcaatgatt gcgacgtctt cgccgcggcg
 120
 gatgtcggca gtcccatggg cggcagcgcg gacgtggctc tcgaaacggc cgatgctgcc
 180
 gtccttcacg gacgggtggg ggacgtcttc gcgatgacg ccctatcgaa gcgaaccatg
 240
 gccaacattc gacagaacat cgcgatcgcg atcgggctaa aggcgggtgtt ccttgtaacg
 300
 accgtcgtcg gcatcacggg gctttggcct gcaatcctcg ccgatacggg gaccacggag
 360
 cttgtgacca tgaacgcg
 378

<210> 2312

<211> 126

<212> PRT

<213> Homo sapiens

<400> 2312

Val	His	Ala	Glu	Met	Leu	Pro	Gln	Asp	Lys	Gln	Arg	Val	Val	Gly	Glu
1				5					10					15	
Leu	Lys	Arg	Gln	Gly	Phe	Ser	Val	Ile	Lys	Val	Gly	Asp	Gly	Ile	Asn
		20						25				30			
Asp	Cys	Asp	Ala	Leu	Ala	Ala	Ala	Asp	Val	Gly	Ser	Pro	Met	Gly	Gly
		35					40					45			
Ser	Ala	Asp	Val	Ala	Leu	Glu	Thr	Ala	Asp	Ala	Ala	Val	Leu	His	Gly
	50					55					60				
Arg	Val	Gly	Asp	Val	Phe	Ala	Met	Ile	Ala	Leu	Ser	Lys	Arg	Thr	Met
65					70				75					80	
Ala	Asn	Ile	Arg	Gln	Asn	Ile	Ala	Ile	Ala	Ile	Gly	Leu	Lys	Ala	Val
			85					90						95	
Phe	Leu	Val	Thr	Thr	Val	Val	Gly	Ile	Thr	Gly	Leu	Trp	Pro	Ala	Ile
		100						105					110		
Leu	Ala	Asp	Thr	Gly	Thr	Thr	Glu	Leu	Val	Thr	Met	Asn	Ala		
		115					120					125			

<210> 2313

<211> 669

<212> DNA

<213> Homo sapiens

<400> 2313

ctagtggcat ggtctcgctg gtcttttagtg gagcataccg acacatcggg gactcaaacg
 60
 atccgaatca tggtctgtcc tggttggcct ggaaccatta acgtacgcct caccatcgc
 120
 ttaagcgacg ccggtctagc tgtcgaagtc accgcgcgca atgtcgggtac gacagcgggg
 180
 ccgcttgat acgcagcaca cccctatctc tgtctgggtg gcaccatcga cgactggaca
 240

gtcgacgccc cgtttacctc gtgggttacag gtcgatgac ggctgctacc aatgcagatg
 300
 cgcgagatgg acagcatcca cgcgctgaac ggtctcacgg gcggacagcg caccttcgat
 360
 accgcttaca ccgtgaaagg aggacggaac cgtcggatcg cccgcatggc gtatccgggt
 420
 ctcaacggtg aaacgagcca cgaattgtgg ggcgacgccg cgatgagctg ggtgcaagtc
 480
 tacaactccag acgaccgcca cagtctggcc atcgagccaa tgacctgcgg cccagatgca
 540
 tttaaatgagg gcccgaacca cggtgacgtc attcgactgg agcccggtaa tgacgtcaca
 600
 ctgcactggg gcacgccta acccgcgga gctcgaaagg acaaggacgg gaaggcagga
 660
 ttcacgcgt
 669

<210> 2314

<211> 206

<212> PRT

<213> Homo sapiens

<400> 2314

Leu	Val	Ala	Trp	Ser	Arg	Trp	Ser	Leu	Val	Glu	His	Thr	Asp	Thr	Ser
1			5					10						15	
Val	Thr	Gln	Thr	Ile	Arg	Ile	Met	Ala	Arg	Pro	Gly	Trp	Pro	Gly	Thr
		20					25						30		
Ile	Asn	Val	Arg	Leu	Thr	His	Arg	Leu	Ser	Asp	Ala	Gly	Leu	Ala	Val
		35				40						45			
Glu	Val	Thr	Ala	Arg	Asn	Val	Gly	Thr	Thr	Ala	Gly	Pro	Leu	Gly	Tyr
	50				55					60					
Ala	Ala	His	Pro	Tyr	Leu	Cys	Leu	Gly	Gly	Thr	Ile	Asp	Asp	Trp	Thr
65				70					75					80	
Val	Asp	Ala	Pro	Phe	Thr	Ser	Trp	Leu	Gln	Val	Asp	Asp	Arg	Leu	Leu
			85					90						95	
Pro	Met	Gln	Met	Arg	Glu	Met	Asp	Ser	Ile	His	Ala	Leu	Asn	Gly	Leu
		100					105						110		
Thr	Gly	Gly	Gln	Arg	Thr	Phe	Asp	Thr	Ala	Tyr	Thr	Val	Lys	Gly	Gly
		115				120						125			
Arg	Asn	Arg	Arg	Ile	Ala	Arg	Met	Ala	Tyr	Pro	Gly	Leu	Asn	Gly	Glu
	130				135						140				
Thr	Ser	His	Glu	Leu	Trp	Gly	Asp	Ala	Ala	Met	Ser	Trp	Val	Gln	Val
145				150					155					160	
Tyr	Thr	Pro	Asp	Asp	Arg	His	Ser	Leu	Ala	Ile	Glu	Pro	Met	Thr	Cys
			165					170						175	
Gly	Pro	Asp	Ala	Phe	Asn	Glu	Gly	Pro	Thr	His	Gly	Asp	Val	Ile	Arg
		180					185						190		
Leu	Glu	Pro	Gly	Asn	Asp	Val	Thr	Leu	His	Trp	Gly	Ile	Ala		
		195				200						205			

<210> 2315

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2315
 nacgcgtccc tcacgcgatac cgagcccgagg atgggaaaac ggggtgatcg cgttgaggcc
 60
 acccaaggcc gaccaattcg catcgataag gcggtcgctt atcacacttc tcgcggcggtg
 120
 ccggtacatg aactgtttga ccgagtgcgc cgcagcttag accgagtgcg tgaacagggg
 180
 cacaacgtct actacgacga acagcgtgca tggcttgacg attactgggc aacggctgat
 240
 gttgaggctg agggtgcccc gaccggtatt cagcaggctg tcagggtgaa cttttccag
 300
 attgctcagg catcagcccg tgcagatcaa cttggcattc cggcaaaggg tgtaaccggg
 360
 tcaggctatg aaggccacta cttttgggac actgagggtt atgtcatccc gatgttgacc
 420
 tacactcatc caagaatcgc tgagaatgcg ctgagattcc ggggtgaatac ctttccgcaa
 480
 gctcgacgcc gggctaagga attgtctgaa cgaggcgccc ttttcccggtg gcgaacaatc
 540
 accggt
 546

<210> 2316
 <211> 182
 <212> PRT
 <213> Homo sapiens

<400> 2316
 Xaa Ala Ser Leu Ile Asp Thr Glu Pro Gly Met Gly Lys Arg Val Tyr
 1 5 10 15
 Arg Val Glu Ala Thr Gln Gly Arg Pro Ile Arg Ile Asp Lys Ala Val
 20 25 30
 Ala Tyr His Thr Ser Arg Gly Val Pro Val His Glu Leu Phe Asp Arg
 35 40 45
 Val Arg Arg Ser Leu Asp Arg Val Arg Glu Gln Gly His Asn Val Tyr
 50 55 60
 Tyr Asp Glu Gln Arg Ala Trp Leu Asp Asp Tyr Trp Ala Thr Ala Asp
 65 70 75 80
 Val Glu Val Glu Gly Ala Pro Thr Gly Ile Gln Gln Ala Val Arg Trp
 85 90 95
 Asn Leu Phe Gln Ile Ala Gln Ala Ser Ala Arg Ala Asp Gln Leu Gly
 100 105 110
 Ile Pro Ala Lys Gly Val Thr Gly Ser Gly Tyr Glu Gly His Tyr Phe
 115 120 125
 Trp Asp Thr Glu Val Tyr Val Ile Pro Met Leu Thr Tyr Thr His Pro
 130 135 140
 Arg Ile Ala Glu Asn Ala Leu Arg Phe Arg Val Asn Thr Leu Pro Gln
 145 150 155 160
 Ala Arg Arg Arg Ala Lys Glu Leu Ser Glu Arg Gly Ala Leu Phe Pro
 165 170 175
 Trp Arg Thr Ile Thr Gly
 180

<210> 2317
 <211> 496
 <212> DNA
 <213> Homo sapiens

<400> 2317
 gccggcgggc tcgggaacgg tcactgacct gcagcaggca atggcggtcg cggtttaatc
 60
 agggttctgc acggagtttt ggatagtcgg tccagtcgcc actggcaagg cgcgaccagg
 120
 cagctgctga cgctgctgtg atgccgagga gatcggagac gattcgtggg tgcattctgcc
 180
 gggtcagtgc gatcagcgcg gtcgttcgag cgcttcctga acgcagcccc tgctggcgca
 240
 gacgtcggct gaggggcct ggtgtgagat gcaaccccg attcctgcca ggaaagagcc
 300
 atccctcggg tcgggtgtctc gatgtgtcag cgagctcggc gatcgcatte ccgaggacct
 360
 cgggcagtgc gattggctcg gtcctgatgg tgagcttccc cggtcgtgat gtcacgtcga
 420
 cctgctcacg ggtgagcgcg acgatgagag tgaggtggag gccgtagagg agcacgagca
 480
 acccagcggc acgcgt
 496

<210> 2318
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 2318
 Met Pro Arg Arg Ser Glu Thr Ile Arg Gly Cys Ile Cys Arg Val Ser
 1 5 10 15
 Ser Ile Ser Ala Val Val Arg Ala Leu Pro Glu Arg Ser Pro Cys Trp
 20 25 30
 Arg Arg Arg Arg Leu Ser Gly Pro Gly Val Arg Cys Asn Pro Gly Phe
 35 40 45
 Leu Pro Gly Lys Ser His Pro Ser Gly Arg Cys Leu Asp Val Ser Ala
 50 55 60
 Ser Ser Ala Ile Ala Phe Pro Arg Thr Ser Gly Ser Ser Ile Gly Ser
 65 70 75 80
 Ala Pro Met Val Ser Phe Pro Gly Arg Asp Val Thr Ser Thr Cys Ser
 85 90 95
 Arg Val Ser Ala Thr Met Arg Val Arg Trp Arg Pro
 100 105

<210> 2319
 <211> 1748
 <212> DNA
 <213> Homo sapiens

<400> 2319
 ntgatcaagt ctcggtctct ggattatacc tttgttcctc gaacttggat ctttctgct
 60

gaatatactc aattccaaaa ttatgtgaaa gaattgaaga aaaaacggaa gcagaaaact
120
ttttagtgga aaccagctaa tgggtgcaatg ggtcatggga tttctttgat aagaaatggt
180
gacaaaacttc catctcagga tcatttgatt gttcaagaat acattgaaaa gcctttccta
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1740

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1748

<210> 2320

<211> 532

<212> PRT

<213> Homo sapiens

<400> 2320

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		20					25					30			
Lys	Lys	Lys	Arg	Lys	Gln	Lys	Thr	Phe	Ile	Val	Lys	Pro	Ala	Asn	Gly
		35					40					45			
Ala	Met	Gly	His	Gly	Ile	Ser	Leu	Ile	Arg	Asn	Gly	Asp	Lys	Leu	Pro
	50					55					60				
Ser	Gln	Asp	His	Leu	Ile	Val	Gln	Glu	Tyr	Ile	Glu	Lys	Pro	Phe	Leu
65				70					75					80	
Met	Glu	Gly	Tyr	Lys	Phe	Asp	Leu	Arg	Ile	Tyr	Ile	Leu	Val	Thr	Ser
			85					90						95	
Cys	Asp	Pro	Leu	Lys	Ile	Phe	Leu	Tyr	His	Asp	Gly	Leu	Val	Arg	Met
		100						105					110		
Gly	Thr	Glu	Lys	Tyr	Ile	Pro	Pro	Asn	Glu	Ser	Asn	Leu	Thr	Gln	Leu
		115					120						125		
Tyr	Met	His	Leu	Thr	Asn	Tyr	Ser	Val	Asn	Lys	His	Asn	Glu	His	Phe
	130					135					140				
Glu	Arg	Asp	Glu	Thr	Glu	Asn	Lys	Gly	Ser	Lys	Arg	Ser	Ile	Lys	Trp
145					150					155				160	
Phe	Thr	Glu	Phe	Leu	Gln	Ala	Asn	Gln	His	Asp	Val	Ala	Lys	Phe	Trp
			165					170						175	
Ser	Asp	Ile	Ser	Glu	Leu	Val	Val	Lys	Thr	Leu	Ile	Val	Ala	Glu	Pro
		180						185					190		
His	Val	Leu	His	Ala	Tyr	Arg	Met	Cys	Arg	Pro	Gly	Gln	Pro	Pro	Gly
	195						200					205			
Ser	Glu	Ser	Val	Cys	Phe	Glu	Val	Leu	Gly	Phe	Asp	Ile	Leu	Leu	Asp
	210					215					220				
Arg	Lys	Leu	Lys	Pro	Trp	Leu	Leu	Glu	Ile	Asn	Arg	Ala	Pro	Ser	Phe
225					230						235			240	
Gly	Thr	Asp	Gln	Lys	Ile	Asp	Tyr	Asp	Val	Lys	Arg	Gly	Val	Leu	Leu
			245						250					255	
Asn	Ala	Leu	Lys	Leu	Leu	Asn	Ile	Arg	Thr	Ser	Asp	Lys	Arg	Arg	Asn
		260						265					270		
Leu	Ala	Lys	Gln	Lys	Ala	Glu	Ala	Gln	Arg	Arg	Leu	Tyr	Gly	Gln	Asn
	275						280						285		
Ser	Ile	Lys	Arg	Leu	Leu	Pro	Gly	Ser	Ser	Asp	Trp	Glu	Gln	Gln	Arg
	290					295					300				
His	Gln	Leu	Glu	Arg	Arg	Lys	Glu	Glu	Leu	Lys	Glu	Arg	Leu	Ala	Gln
305					310						315			320	
Val	Arg	Lys	Gln	Ile	Ser	Arg	Glu	Glu	His	Glu	Asn	Arg	His	Met	Gly
			325						330					335	
Asn	Tyr	Arg	Arg	Ile	Tyr	Pro	Pro	Glu	Asp	Lys	Ala	Leu	Leu	Glu	Lys

340 345 350
 Tyr Glu Asn Leu Leu Ala Val Ala Phe Gln Thr Phe Leu Ser Gly Arg
 355 360 365
 Ala Ala Ser Phe Gln Arg Glu Leu Asn Asn Pro Leu Lys Arg Met Lys
 370 375 380
 Glu Glu Asp Ile Leu Asp Leu Leu Glu Gln Cys Glu Ile Asp Asp Glu
 385 390 395 400
 Lys Leu Met Gly Lys Thr Thr Lys Thr Arg Gly Pro Lys Pro Leu Cys
 405 410 415
 Ser Met Pro Glu Ser Thr Glu Ile Met Lys Arg Pro Lys Tyr Cys Ser
 420 425 430
 Ser Asp Ser Ser Tyr Asp Ser Ser Ser Ser Ser Glu Ser Asp Glu
 435 440 445
 Asn Glu Lys Glu Glu Tyr Gln Asn Lys Lys Arg Glu Lys Gln Val Thr
 450 455 460
 Tyr Asn Leu Lys Pro Ser Asn His Tyr Lys Leu Ile Gln Gln Pro Ser
 465 470 475 480
 Ser Ile Arg Arg Ser Val Ser Cys Pro Arg Ser Ile Ser Ala Gln Ser
 485 490 495
 Pro Ser Ser Gly Asp Thr Arg Pro Phe Ser Ala Gln Gln Met Ile Ser
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 Val Ser Arg Pro Thr Ser Ala Ser Arg Ser His Ser Leu Asn Pro Gly
 515 520 525
 Leu Pro Pro Thr
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<210> 2321

<211> 433

<212> DNA

<213> Homo sapiens

<400> 2321

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 120
 acaggtcata atggcaggta acagaccatt tattgaagtg ctgaaacaaa tagaaaacaa
 180
 agtccaggac accatcacag agcagtactt cccttggtgag atactctcag ctaagtaaga
 240
 attgagttag acaacaataa aacaaatacc cataggcttt tcaaacagta acaaccgct
 300
 cagggttagc agcattttcta gaccttgatg gtaaaatgat gttctcaacc tttgctttca
 360
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 420
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 433

<210> 2322

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2322

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      20           25           30
Ser Gln Gly Lys Tyr Cys Ser Val Met Val Ser Trp Thr Leu Phe Ser
      35           40           45
Ile Cys Phe Ser Thr Ser Ile Asn Gly Leu Leu Pro Ala Ile Met Thr
      50           55           60
Cys Met His Leu Leu Ser Ser Phe Ser Lys Gln Lys Lys Leu Cys Gly
65           70           75           80
Cys Ile Ser Arg Thr Leu Asn His Phe Gln Asp Ser Ile Glu Leu Glu
      85           90           95
Thr His Ile Asp Thr Ser Thr Gln Leu
      100          105

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<210> 2323

<211> 532

<212> DNA

<213> Homo sapiens

<400> 2323

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120
ccaggcagag ccagctcggc ggccccccgc acatagctgg ggtagcagg ggtagcttct
180
ctgccgggca cagcgnctct caggagccag ccggggagag ctgagccaag gccgaaggag
240
ccgcctgcgg gcttagccgc cccctcccgc ccgttggccc cagagcggac gctgggacgc
300
ccgggggtctg gcagctctgc gcccggttag gagcgggagg gcgagcatta gcctgcgtcc
360
tggagaaggg gcgcagcgcc gcagttgagg ccgaagcagc ccctcgcggg cgtaggatac
420
ctgtcagtga gcgcccggat tgcacggccc ccgggtagtg cctgccggcg aggggaggga
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gctcgggtga cttggccatc cccatccccg gccacggccc ggagggcggc cg
532

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<210> 2324

<211> 51

<212> PRT

<213> Homo sapiens

<400> 2324

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Thr Arg Gln Asn Trp Gln Ser Trp Arg Leu Arg Gly Arg Gly Lys Trp
 1           5           10           15
Thr Trp Arg Pro Ser Ser Thr Val His Pro Leu Gly Lys Lys Ala Glu
      20           25           30
Gly Ala Ser Ser Lys Ser Phe Leu Pro Gly Arg Ala Ser Ser Ala Ala
      35           40           45
Pro Arg Thr

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50

<210> 2325

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2325

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 120
 ccccgcaagg gccgcattat tcccggagcc gatgctgatg tgggtggtg ggacccagaa
 180
 gccacaaaga ccatctcagc cagcacgcag gtccagggag gagacttcaa cctgtatgag
 240
 aacatgcgct gccacggcgt gccactggtc accatcagcc gggggcgcggt cgtgtatgag
 300
 aacggcgctc tcatgtgcgc cgagggcacc ggcaagttct gtcccctgag gtccttccca
 360
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<210> 2326

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2326

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Gly	Gly	Lys	Met	Asp	Glu	Asn	Arg	Phe	Val	Ala	Val	Thr	Ser	Ser	Asn
		20						25					30		
Ala	Ala	Lys	Leu	Leu	Asn	Leu	Tyr	Pro	Arg	Lys	Gly	Arg	Ile	Ile	Pro
		35					40					45			
Gly	Ala	Asp	Ala	Asp	Val	Val	Val	Trp	Asp	Pro	Glu	Ala	Thr	Lys	Thr
	50					55				60					
Ile	Ser	Ala	Ser	Thr	Gln	Val	Gln	Gly	Gly	Asp	Phe	Asn	Leu	Tyr	Glu
65					70					75				80	
Asn	Met	Arg	Cys	His	Gly	Val	Pro	Leu	Val	Thr	Ile	Ser	Arg	Gly	Arg
			85						90					95	
Val	Val	Tyr	Glu	Asn	Gly	Val	Phe	Met	Cys	Ala	Glu	Gly	Thr	Gly	Lys
		100					105						110		
Phe	Cys	Pro	Leu	Arg	Ser	Phe	Pro	Asp	Thr	Val	Tyr	Lys	Lys	Leu	Val
	115						120					125			
Gln	Arg	Glu	Lys	Thr	Leu	Lys	Val	Arg	Gly	Val	Ala	Arg	Thr	Pro	Tyr
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Leu	Gly	Asp	Val	Ala	Val	Val	Val	His							
145					150										

<210> 2327

<211> 599

<212> DNA

<213> Homo sapiens

<400> 2327

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 180
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 360
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 420
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 480
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<210> 2328

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2328

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 Phe Leu Pro Val Ala Phe Pro Val Gly Asn Ala Phe Ser Tyr Tyr Gln
 20 25 30
 Ser Asn Arg Gly Phe Gln Glu Asp Ser Glu Ile Arg Ala Ala Glu Lys
 35 40 45
 Lys Phe Gly Ser Asn Lys Ala Glu Met Val Val Pro Asp Phe Ser Glu
 50 55 60
 Leu Phe Lys Glu Arg Ala Thr Ala Pro Phe Phe Val Phe Gln Val Phe
 65 70 75 80
 Cys Val Gly Leu Trp Cys Leu Asp Glu Tyr Trp Tyr Tyr Ser Val Phe
 85 90 95
 Thr Leu Ser Met Leu Val Ala Phe Glu Ala Ser Leu Val Gln Gln
 100 105 110
 Met Arg Asn Met Ser Glu Ile Arg Lys Met Gly Asn Lys Pro His Met
 115 120 125
 Ile Gln Val Tyr Arg Ser Arg Lys Trp Arg Pro Ile Ala Ser Asp Glu
 130 135 140
 Ile Val Pro Gly Asp Ile Val Ser Ile Gly Glu Ala Gly Phe Arg Ser
 145 150 155 160
 Val Pro Val Gly Ala Pro Ala Ser Gly Pro Leu Ala Asn Pro Pro Ala
 165 170 175
 Ser Ala Leu Gln Ala Ala Pro His Arg Arg Thr Trp Cys His Val Thr

180
Cys Phe Cys Cys Glu Ala Ala
195

185

190

<210> 2329
<211> 392
<212> DNA
<213> Homo sapiens

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180
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240
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300
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392

<210> 2330
<211> 90
<212> PRT
<213> Homo sapiens

<400> 2330
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Asn Pro Val Pro Ser Ala Ser Arg Val Ala His His His Ala Thr Arg
20 25 30
Phe Arg Leu Ala Val Gln Ala Phe Ile Val Val Val Ile Gly Gly Leu
35 40 45
Leu Trp Ala Leu Thr Ala Asp Ala Phe Gln Leu Ser Thr Val Met Trp
50 55 60
Met Leu Gly Ala Trp Val Val Leu Phe Leu Val Leu Phe Val Ile Gln
65 70 75 80
Asn Leu Arg Leu His Ala Ala Arg Lys Asp
85 90

<210> 2331
<211> 2813
<212> DNA
<213> Homo sapiens

<400> 2331
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120

aaatTTtAtc tAttacaaag aactTTtaaag ttgagaatat tggacctctt cctataactg
180
tttcgtctct gaaaattaat gggTataact gccAaggtta tggattcgag gtgctggatt
240
gggattcagt ttcccttgga cccaaacaca tcccgcgata tcagcattgt gttcactcca
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420
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480
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1260
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1320
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1440
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1740

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 1920
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 1980
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 2040
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 2100
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 2160
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 2520
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 2580
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<210> 2332

<211> 789

<212> PRT

<213> Homo sapiens

<400> 2332

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 20 25 30
 His Leu Leu Pro Leu Cys Ala Asp Val Val Pro Gly Pro Ser Trp Glu
 35 40 45
 Glu Ser Phe Trp Arg Leu Thr Val Phe Phe Val Ser Leu Ser Leu Leu
 50 55 60
 Gly Val Ile Leu Ile Ala Phe Gln Gln Ala Gln Tyr Ile Leu Met Glu
 65 70 75 80
 Phe Met Lys Thr Arg Gln Arg Gln Asn Ala Ser Ser Ser Ser Gln Gln

1705

515 520 525
 Asp Ser Val Ser Gln Asn Asp Phe Pro Ser Glu Ala Pro Ile Ser Leu
 530 535 540
 Asn Leu Ser His Asn Ile Cys Asn Pro Met Thr Val Asn Ser Leu Pro
 545 550 555 560
 Gln Tyr Ala Glu Pro Ser Cys Pro Ser Leu Pro Ala Gly Pro Thr Gly
 565 570 575
 Val Glu Glu Asp Lys Gly Leu Tyr Ser Pro Gly Asp Leu Trp Pro Thr
 580 585 590
 Pro Pro Val Cys Val Thr Ser Ser Leu Asn Cys Thr Leu Glu Asn Gly
 595 600 605
 Val Pro Cys Val Ile Gln Glu Ser Ala Pro Val His Asn Ser Phe Ile
 610 615 620
 Asp Trp Ser Ala Thr Cys Glu Gly Gln Phe Ser Ser Ala Tyr Cys Pro
 625 630 635 640
 Leu Glu Leu Asn Asp Tyr Asn Ala Phe Pro Glu Glu Asn Met Asn Tyr
 645 650 655
 Ala Asn Gly Phe Pro Cys Pro Ala Asp Val Gln Thr Asp Phe Ile Asp
 660 665 670
 His Asn Ser Gln Ser Thr Trp Asn Thr Pro Pro Asn Met Pro Ala Ala
 675 680 685
 Trp Gly His Ala Ser Phe Ile Ser Ser Pro Pro Tyr Leu Thr Ser Thr
 690 695 700
 Arg Ser Leu Ser Pro Met Ser Gly Leu Phe Gly Ser Ile Trp Ala Pro
 705 710 715 720
 Gln Ser Asp Val Tyr Glu Asn Cys Cys Pro Ile Asn Pro Thr Thr Glu
 725 730 735
 His Ser Thr His Met Glu Asn Gln Ala Val Val Cys Lys Glu Tyr Tyr
 740 745 750
 Pro Gly Phe Asn Pro Phe Arg Ala Tyr Met Asn Leu Asp Ile Trp Thr
 755 760 765
 Thr Thr Ala Asn Arg Asn Ala Asn Phe Pro Leu Ser Arg Asp Ser Ser
 770 775 780
 Tyr Cys Gly Asn Val
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<210> 2333

<211> 501

<212> DNA

<213> Homo sapiens

<400> 2333

cgtatgattg gtgtgggaca aatactattc aacaagagta cctaaatcat tgtttaaggc
 60
 gaagtaataa atatgaatgg ggtgtatcat ataatagaaca acgaatatcc atatagtgc
 120
 gacgaagttc ttcacaaaagc aaaatcatat ttgtcagcag atgaatatga gtatgtttta
 180
 aaaagctatc atattgctta tgaagcacat aaaggtcagt tccgaaaaaa cggattacca
 240
 tacattatgc atcctataca agttgcaggt attttaacag aaatgcgatt agacggaccg
 300
 acgattgtcg cagggtttttt gcatgatgta attgaagata caccgtatac atttgaagat
 360

gtaaaagaaa tggtcaatga agaagttgct cgaattgttg atggtgtgac gaagcttaaa
 420
 aaaataaaat accgctcaaa agaagaacaa caagctgaaa atcatcgcaa gttattttatt
 480
 gcgattgccca aagatgtacg c
 501

<210> 2334
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2334
 Met Asn Gly Val Tyr His Ile Met Asn Asn Glu Tyr Pro Tyr Ser Ala
 1 5 10 15
 Asp Glu Val Leu His Lys Ala Lys Ser Tyr Leu Ser Ala Asp Glu Tyr
 20 25 30
 Glu Tyr Val Leu Lys Ser Tyr His Ile Ala Tyr Glu Ala His Lys Gly
 35 40 45
 Gln Phe Arg Lys Asn Gly Leu Pro Tyr Ile Met His Pro Ile Gln Val
 50 55 60
 Ala Gly Ile Leu Thr Glu Met Arg Leu Asp Gly Pro Thr Ile Val Ala
 65 70 75 80
 Gly Phe Leu His Asp Val Ile Glu Asp Thr Pro Tyr Thr Phe Glu Asp
 85 90 95
 Val Lys Glu Met Phe Asn Glu Glu Val Ala Arg Ile Val Asp Gly Val
 100 105 110
 Thr Lys Leu Lys Lys Ile Lys Tyr Arg Ser Lys Glu Glu Gln Gln Ala
 115 120 125
 Glu Asn His Arg Lys Leu Phe Ile Ala Ile Ala Lys Asp Val Arg
 130 135 140

<210> 2335
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 2335
 ggatcctgag cgtggggact tctttgcact ccacagaacc ctcaacttga cctctacttt
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 tctctgcaga tggaccacac agcattcccc tgtggctgct gcagggaggg ctgtgagaac
 120
 cccatgggccc gtgtggaatt taatcaggca agagttcaga cccatttcat ccacacactc
 180
 accgcctgc agttggaaca ggaggctgag agctttaggg agctggaggc ccctgcccag
 240
 ggcagcccac ccagccctgg tgaggaggcc ctggtcccta ctttcccact ggccaagccc
 300
 cccatgaaca atgagctggg agacaacagc tgcagcagcg acatgactga ttcttccaca
 360
 gcatttcat cagcatcggg cactagt
 387

<210> 2336

<211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2336
 Met Asp His Thr Ala Phe Pro Cys Gly Cys Cys Arg Glu Gly Cys Glu
 1 5 10 15
 Asn Pro Met Gly Arg Val Glu Phe Asn Gln Ala Arg Val Gln Thr His
 20 25 30
 Phe Ile His Thr Leu Thr Arg Leu Gln Leu Glu Gln Glu Ala Glu Ser
 35 40 45
 Phe Arg Glu Leu Glu Ala Pro Ala Gln Gly Ser Pro Pro Ser Pro Gly
 50 55 60
 Glu Glu Ala Leu Val Pro Thr Phe Pro Leu Ala Lys Pro Pro Met Asn
 65 70 75 80
 Asn Glu Leu Gly Asp Asn Ser Cys Ser Ser Asp Met Thr Asp Ser Ser
 85 90 95
 Thr Ala Ser Ser Ser Ala Ser Gly Thr Ser
 100 105

<210> 2337
 <211> 359
 <212> DNA
 <213> Homo sapiens

<400> 2337
 ngagaagagg aggagtcac ggcaggggcc ggcattctcca ggcctcgcca agccgctggg
 60
 accatgtgca gctcaagaat ggcctccggc ccatcggcct cggggcaggg gaagggcagc
 120
 ttctctgcac cagcttcctt gctgggctcc agggcccaca ggctgaggcc gggggcccag
 180
 ggggtcaatgc caggcaccct gctattgagg aacctatcca ggaggaagga ctcgggcaga
 240
 cctgcgggat cctcgtcctc ccacgggtcc tcatggcaga agcagaagga gctggagtcg
 300
 ctgaggtccg tgggcaggcg ggctgggccc aacgtggggt caccgacctc ctcaaagct
 359

<210> 2338
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 2338
 Met Cys Ser Ser Arg Met Ala Ser Gly Pro Ser Ala Ser Gly Gln Gly
 1 5 10 15
 Lys Gly Ser Phe Ser Ala Pro Ala Ser Leu Leu Gly Ser Arg Ala His
 20 25 30
 Arg Leu Arg Pro Gly Ala Gln Gly Ser Met Pro Gly Thr Leu Leu Leu
 35 40 45
 Arg Asn Leu Ser Arg Arg Lys Asp Ser Gly Arg Pro Ala Gly Ser Ser
 50 55 60
 Ser Ser His Gly Ser Ser Trp Gln Lys Gln Lys Glu Leu Glu Ser Leu

<400> 2341

gccaaacctc cctccatcc tgcccaagat ggatcttgct gagcctccct ggcatatgcc
 60
 tctgcaggag gagccagagg aggtcacgga ggaggaggag gaaagggag aagaggagag
 120
 ggagaaggaa gcagaggagg aggaggaaga ggaagagctg ctctgtgag cgggtcccca
 180
 ggagccaccg cacaggccca tgccccttca cctagcacca gcagcagcac cagcagccag
 240
 agtcctgggg ccaccggga caggcaggag gattctggag accaggccac atcaggcnat
 300
 ggaagtggag agcagtgtga aaccacctt gtcagtgcc tcagtcaccc caagtacagt
 360
 ggccccgggg gtccagaact atagccagga gtctgggggc actgagtggc n
 411

<210> 2342

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2342

Ala Ser Leu Ala Tyr Ala Ser Ala Gly Gly Ala Arg Gly Gly His Gly
 1 5 10 15
 Gly Gly Gly Gly Lys Gly Arg Arg Gly Glu Gly Glu Gly Ser Arg Gly
 20 25 30
 Gly Gly Gly Arg Gly Arg Ala Ala Pro Val Ser Gly Ser Pro Gly Ala
 35 40 45
 Thr Ala Gln Ala His Ala Pro Ser Pro Ser Thr Ser Ser Thr Ser
 50 55 60
 Ser Gln Ser Pro Gly Ala Thr Arg His Arg Gln Glu Asp Ser Gly Asp
 65 70 75 80
 Gln Ala Thr Ser Gly Xaa Gly Ser Gly Glu Gln Cys Glu Thr His Leu
 85 90 95
 Val Ser Ala Leu Ser His Pro Lys Tyr Ser Gly Pro Gly Gly Ser Glu
 100 105 110
 Leu

<210> 2343

<211> 522

<212> DNA

<213> Homo sapiens

<400> 2343

ggcccgagc agatgctgat gccttcacag ttccccaacc agggccagca gggattctct
 60
 ggaggccagg gaccctacca agccatgtcc caggacatgg gcaataccca agacatgttc
 120
 agccctgata agagctcaat gcccatgagc aacgtgggca ccaccggct cagccacatg
 180
 cctctgcccc ctgcgtccaa tcctctggg accgtgcatt cagccccaaa ccgggggcta
 240
 ggaggcggc cttcggaact caccatcagt attaatacaga tgggctcacc gggcatgggg
 300

cacttgaagt cgcccaccct tagccagggt cactcacccc tggtcacctc gccctctgcc
 360
 aacctcaagt caccacagac tccctcacag atggtgccct tgccttctgc caaccgcca
 420
 ggacctctca agtcgcccc ggtcctcggc tcttccctca gtgtccgttc acccactggc
 480
 tcgcccagca ggctcaagtc tcttccatg gcggtgcctt ct
 522

<210> 2344

<211> 174

<212> PRT

<213> Homo sapiens

<400> 2344

Gly	Pro	Gln	Lys	Met	Leu	Met	Pro	Ser	Gln	Phe	Pro	Asn	Gln	Gly	Gln
1			5					10					15		
Gln	Gly	Phe	Ser	Gly	Gly	Gln	Gly	Pro	Tyr	Gln	Ala	Met	Ser	Gln	Asp
		20					25					30			
Met	Gly	Asn	Thr	Gln	Asp	Met	Phe	Ser	Pro	Asp	Gln	Ser	Ser	Met	Pro
		35				40					45				
Met	Ser	Asn	Val	Gly	Thr	Thr	Arg	Leu	Ser	His	Met	Pro	Leu	Pro	Pro
	50				55					60					
Ala	Ser	Asn	Pro	Pro	Gly	Thr	Val	His	Ser	Ala	Pro	Asn	Arg	Gly	Leu
65				70				75					80		
Gly	Arg	Arg	Pro	Ser	Asp	Leu	Thr	Ile	Ser	Ile	Asn	Gln	Met	Gly	Ser
		85						90				95			
Pro	Gly	Met	Gly	His	Leu	Lys	Ser	Pro	Thr	Leu	Ser	Gln	Val	His	Ser
		100						105				110			
Pro	Leu	Val	Thr	Ser	Pro	Ser	Ala	Asn	Leu	Lys	Ser	Pro	Gln	Thr	Pro
		115					120					125			
Ser	Gln	Met	Val	Pro	Leu	Pro	Ser	Ala	Asn	Pro	Pro	Gly	Pro	Leu	Lys
		130					135					140			
Ser	Pro	Gln	Val	Leu	Gly	Ser	Ser	Leu	Ser	Val	Arg	Ser	Pro	Thr	Gly
145				150					155					160	
Ser	Pro	Ser	Arg	Leu	Lys	Ser	Pro	Ser	Met	Ala	Val	Pro	Ser		
			165					170							

<210> 2345

<211> 561

<212> DNA

<213> Homo sapiens

<400> 2345

nagatctccg tcttgatctt gagcaccgag gcactggggg gggaggacag cagccgcggg
 60
 ggcctccacc agcccgcgtc caggccgcct gggctcgacg cgctggacag gcgcccggcg
 120
 ctggcgctgc cgcccttttg ccgtttccgc cttttcttgc gcttctggtg cttgctggag
 180
 gcctgcgcgc ccgcctcgcc tgcgctgtcc gagtccttgg cgctgtcgga cgtgagtga
 240
 tcgcagttct gcagccgcag gtccgactcg ctctccacca tagctattaa tgccaagaat
 300

gcaaatgaaa agaatatcat ctgggtgaat taccttctta gcaatcctga gtacaaggac
 360
 acacccatgg acatcgaca gctcccccat ctgccggaga aaacttccga atcctcggag
 420
 acatccgact ctgagtcaga ctctaaagac acctcaggta ttacagagga caacgagaac
 480
 tccaagnntc cgacgagaag gggaaccagt ccgagaacag cgaagaccg gagcccgacc
 540
 ggaagaagtc gggcaacg t
 561

<210> 2346
 <211> 187
 <212> PRT
 <213> Homo sapiens

<400> 2346
 Xaa Ile Ser Val Leu Ile Leu Ser Thr Glu Ala Leu Gly Gly Glu Asp
 1 5 10 15
 Ser Ser Arg Gly Gly Leu His Gln Pro Ala Ser Arg Pro Pro Gly Leu
 20 25 30
 Asp Ala Leu Asp Arg Arg Arg Arg Leu Ala Leu Pro Pro Phe Cys Arg
 35 40 45
 Phe Arg Leu Phe Leu Arg Phe Trp Cys Leu Leu Glu Ala Cys Ala Pro
 50 55 60
 Ala Ser Pro Ala Leu Ser Glu Ser Leu Ala Leu Ser Asp Val Ser Asp
 65 70 75 80
 Ser Gln Phe Cys Ser Arg Arg Ser Asp Ser Leu Ser Thr Ile Ala Ile
 85 90 95
 Asn Ala Lys Asn Ala Asn Glu Lys Asn Ile Ile Trp Val Asn Tyr Leu
 100 105 110
 Leu Ser Asn Pro Glu Tyr Lys Asp Thr Pro Met Asp Ile Ala Gln Leu
 115 120 125
 Pro His Leu Pro Glu Lys Thr Ser Glu Ser Ser Glu Thr Ser Asp Ser
 130 135 140
 Glu Ser Asp Ser Lys Asp Thr Ser Gly Ile Thr Glu Asp Asn Glu Asn
 145 150 155 160
 Ser Lys Xaa Pro Thr Arg Arg Gly Thr Ser Pro Arg Thr Ala Lys Thr
 165 170 175
 Arg Ser Pro Thr Gly Arg Ser Arg Ala Thr Arg
 180 185

<210> 2347
 <211> 375
 <212> DNA
 <213> Homo sapiens

<400> 2347
 atcagcgaag aacacggcag gaccctggaa gacgccgccc gtgaattgaa gcgtggtatc
 60
 gagaacgtcg agtacgcctg cgccgcgccg gaagtactga aggggtgaata cagccgtaac
 120
 gtcggtccga acatcgacgc ctgggtccgat ttccagccgc tgggcgtggt ggcggggatc
 180

acgccattca acttcccggc gatggtgccc ctgtggatgt atccgttggc gatcgtttgc
 240
 ggtaactgct ttatcctcaa gccgtccgag cgtgatccga gctcgacctt gctgatcgcc
 300
 cagctgttgc aggaagccgg ttgccccaaa ggtgtgctga acgtggtgca tggtgacaag
 360
 accgcggtgg acgcg
 375

<210> 2348

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2348

Ile	Ser	Glu	Glu	His	Gly	Arg	Thr	Leu	Glu	Asp	Ala	Ala	Gly	Glu	Leu
1				5				10					15		
Lys	Arg	Gly	Ile	Glu	Asn	Val	Glu	Tyr	Ala	Cys	Ala	Ala	Pro	Glu	Val
			20				25						30		
Leu	Lys	Gly	Glu	Tyr	Ser	Arg	Asn	Val	Gly	Pro	Asn	Ile	Asp	Ala	Trp
		35					40					45			
Ser	Asp	Phe	Gln	Pro	Leu	Gly	Val	Val	Ala	Gly	Ile	Thr	Pro	Phe	Asn
	50					55					60				
Phe	Pro	Ala	Met	Val	Pro	Leu	Trp	Met	Tyr	Pro	Leu	Ala	Ile	Val	Cys
65				70					75				80		
Gly	Asn	Cys	Phe	Ile	Leu	Lys	Pro	Ser	Glu	Arg	Asp	Pro	Ser	Ser	Thr
			85					90					95		
Leu	Leu	Ile	Ala	Gln	Leu	Leu	Gln	Glu	Ala	Gly	Leu	Pro	Lys	Gly	Val
		100					105						110		
Leu	Asn	Val	Val	His	Gly	Asp	Lys	Thr	Ala	Val	Asp	Ala			
	115						120					125			

<210> 2349

<211> 417

<212> DNA

<213> Homo sapiens

<400> 2349

nnnaaaaaaaaa aaaaaaaaaa aaaaacacaa tatttaaatgg acgcggttta ttcagcaggt
 60
 gctgacaaag tttttggtgt cccaggagat tttaatctag cctttttaga tgatattatt
 120
 gcacataatc atattaaatg gatttgtaat acaaatgaac ttaatgcaag ttatgccgct
 180
 gacggatatg cacgtattaa tggcatcggg gcaatggtaa caacatttgg agtgggtgaa
 240
 ttaagtgtctg tcaacggaat cgctggatct tatgctgagc gtgtaccagt tattgccatc
 300
 actggggcac ctactcgagc tgtagaacia gaaggcaa acgttcacca ttcccttggc
 360
 gaaggaaactt ttgatgatta tagaaaaatg tttgagccta ttacaacagc gcaagct
 417

<210> 2350

<211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2350
 Xaa Lys Lys Lys Lys Lys Lys Lys Thr Gln Tyr Leu Met Asp Ala Val
 1 5 10 15
 Tyr Ser Ala Gly Ala Asp Lys Val Phe Gly Val Pro Gly Asp Phe Asn
 20 25 30
 Leu Ala Phe Leu Asp Asp Ile Ile Ala His Asn His Ile Lys Trp Ile
 35 40 45
 Gly Asn Thr Asn Glu Leu Asn Ala Ser Tyr Ala Ala Asp Gly Tyr Ala
 50 55 60
 Arg Ile Asn Gly Ile Gly Ala Met Val Thr Thr Phe Gly Val Gly Glu
 65 70 75 80
 Leu Ser Ala Val Asn Gly Ile Ala Gly Ser Tyr Ala Glu Arg Val Pro
 85 90 95
 Val Ile Ala Ile Thr Gly Ala Pro Thr Arg Ala Val Glu Gln Glu Gly
 100 105 110
 Lys Tyr Val His His Ser Leu Gly Glu Gly Thr Phe Asp Asp Tyr Arg
 115 120 125
 Lys Met Phe Glu Pro Ile Thr Thr Ala Gln Ala
 130 135

<210> 2351
 <211> 696
 <212> DNA
 <213> Homo sapiens

<400> 2351
 nacgcgttgc cgcgcgataa ctctgggtgag ggtcttgctg gggccctgct ggcccttggt
 60
 ggctccgccc agctgtgcga ccgttcctgg atcaccgacc agtatgaccg gttcgtgcgt
 120
 ggcaatactg tgctcgctca gccgaatgat gccggcatga ttcgtattga cgacaacctc
 180
 ggcacgcgc tgctccttga cgctaacgga cgccagacca cccttaacct gtatcttggc
 240
 gccagctgg ctctttgcga ggcttaccgg aatgtggctg tctctggcgc aactccggtg
 300
 gctgtcactg attgcctcaa ttatggctcc ccgtacgac ccgatgtcat gtggcaattc
 360
 gacgagacca tccttggctt ggttgacggc tgccgcgagc ttggcgtgcc gggttacgggc
 420
 ggtaacgttt cctgcacaa ccgcactgga gatgagtcga ttcggcctac tccgctcgtt
 480
 ggtgtgctcg gcgttattga tgacgtgcat cgtcgcaccc cgtcggcctt cgcacacgac
 540
 ggcgacgctg tcttgctgct aggaacgacg aagtgcgagt tcggcggatc ggtctatgag
 600
 gacgtcatcc acgctggcca cctaggcggt atgccccga tgcccacact gaatgccgag
 660
 aaggccctgg ccgcggtgat ggtggaagcg tcgaag
 696

<210> 2352
 <211> 232
 <212> PRT
 <213> Homo sapiens

<400> 2352
 Xaa Ala Leu Pro Arg Asp Asn Ser Gly Glu Gly Leu Ala Gly Ala Leu
 1 5 10 15
 Leu Ala Leu Val Gly Ser Ala Gln Leu Cys Asp Arg Ser Trp Ile Thr
 20 25 30
 Asp Gln Tyr Asp Arg Phe Val Arg Gly Asn Thr Val Leu Ala Gln Pro
 35 40 45
 Asn Asp Ala Gly Met Ile Arg Ile Asp Asp Asn Leu Gly Ile Ala Leu
 50 55 60
 Ser Leu Asp Ala Asn Gly Arg Gln Thr Thr Leu Asn Pro Tyr Leu Gly
 65 70 75 80
 Ala Gln Leu Ala Leu Cys Glu Ala Tyr Arg Asn Val Ala Val Ser Gly
 85 90 95
 Ala Thr Pro Val Ala Val Thr Asp Cys Leu Asn Tyr Gly Ser Pro Tyr
 100 105 110
 Asp Pro Asp Val Met Trp Gln Phe Asp Glu Thr Ile Leu Gly Leu Val
 115 120 125
 Asp Gly Cys Arg Glu Leu Gly Val Pro Val Thr Gly Gly Asn Val Ser
 130 135 140
 Leu His Asn Arg Thr Gly Asp Glu Ser Ile Arg Pro Thr Pro Leu Val
 145 150 155 160
 Gly Val Leu Gly Val Ile Asp Asp Val His Arg Arg Ile Pro Ser Ala
 165 170 175
 Phe Ala His Asp Gly Asp Ala Val Leu Leu Leu Gly Thr Thr Lys Cys
 180 185 190
 Glu Phe Gly Gly Ser Val Tyr Glu Asp Val Ile His Ala Gly His Leu
 195 200 205
 Gly Gly Met Pro Pro Met Pro Asp Leu Asn Ala Glu Lys Ala Leu Ala
 210 215 220
 Ala Val Met Val Glu Ala Ser Lys
 225 230

<210> 2353
 <211> 422
 <212> DNA
 <213> Homo sapiens

<400> 2353
 nnagcaatct cagaagaatt gctggctgag ttttcaaact atggtgtcaa agtagtaccg
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 atttcagggtg atgtttcaga ctttgcagat gccaaagcgta tggtagatca agcgattaca
 120
 gaactcgggtt ctgttgatgt cttgggtcaac aatgctggga tcaactcaaga tacgcttatg
 180
 ctcaagatga ccgaagaaga ctttgaaaaa gtgattaaga tcaacttgac aggtgccttc
 240
 aacatgacgc aagcagtctt gaaacagatg atcaaggcac gtgaagggtgc gattatcaac
 300

atgtctagtg tggtcggttt gatgggaaat atcggacaag ccaactatgc agcttctaaa
 360
 gcaggcttga ttggttttac caagtcagtt gcacgtgaag ttgccaatcg caacgtacgc
 420
 gt
 422

<210> 2354
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 2354
 Xaa Ala Ile Ser Glu Glu Leu Leu Ala Glu Phe Ser Asn Tyr Gly Val
 1 5 10 15
 Lys Val Val Pro Ile Ser Gly Asp Val Ser Asp Phe Ala Asp Ala Lys
 20 25 30
 Arg Met Val Asp Gln Ala Ile Thr Glu Leu Gly Ser Val Asp Val Leu
 35 40 45
 Val Asn Asn Ala Gly Ile Thr Gln Asp Thr Leu Met Leu Lys Met Thr
 50 55 60
 Glu Glu Asp Phe Glu Lys Val Ile Lys Ile Asn Leu Thr Gly Ala Phe
 65 70 75 80
 Asn Met Thr Gln Ala Val Leu Lys Gln Met Ile Lys Ala Arg Glu Gly
 85 90 95
 Ala Ile Ile Asn Met Ser Ser Val Val Gly Leu Met Gly Asn Ile Gly
 100 105 110
 Gln Ala Asn Tyr Ala Ala Ser Lys Ala Gly Leu Ile Gly Phe Thr Lys
 115 120 125
 Ser Val Ala Arg Glu Val Ala Asn Arg Asn Val Arg
 130 135 140

<210> 2355
 <211> 5191
 <212> DNA
 <213> Homo sapiens

<400> 2355
 cttgccaagt ttgacggtga agtgatctgt gaacctccca acaacaaact ggacaaattc
 60
 agcggaaccc tctactggaa ggaaaataag ttcctctga gcaaccagaa catgctgctg
 120
 cggggctgtg tgctgcgaaa caccgagtgg tgcttcgggc tggatcatctt tgcaggctct
 180
 gacactaagc tgatgcaaaa cagcggcaga acaaagttca aaagaacgag tatcgatcgc
 240
 ctaatgaata ccctgggtgt ctggattttt ggattcctgg tttgcatggg ggtgatcctg
 300
 gccattggca atgccatctg ggagcacgag gtggggatgc gtttccaggt ctacctgccg
 360
 tgggatgagg cagtggacag tgccttcttc tctggcttcc tctccttctg gtcctacatc
 420
 atcatcctca acaccgttgt gccatttca ctctatgtca gtgtggaggt catccgtctg
 480

ggccacagct acttcatcaa ctgggataag aagatgttct gcatgaagaa gcggacgcct
540
gcagaagccc gcaccaccac cctaaacgag gagctgggccc aggtggagta catcttctcc
600
gacaagacgg gcaccctcac ccagaacatc atggttttca acaagtgtc catcaatggc
660
cacagctatg gtgatgtgtt tgacgtcctg ggacacaaag ctgaattggg agagaggcct
720
gaacctgttg acttctcctt caatcctctg gctgacaaga agttcttatt ttgggacccc
780 aggtgtcaa gatcggggac cccacacgc atgagttctt ccgcctcctt 840
tcctgtgtc atactgtcat gtcagaagaa aagaacgaag gagagctgta ctacaaagct
900
cagtcctcag atgagggggc cctggtcacc gcagccagga actttggttt tgttttcgc
960
tctcgacccc ccaaaacaat caccgtccat gagatgggca cagccatcac ctaccagctg
1020
ctggccatcc tggacttcaa caacatccgc aagcggatgt cggcatagat gcggaatcca
1080
gaggggaaga tccgactcta ctgcaaaggg gctgacacta tctactgga cagactgcac
1140
cactccactc aagagctgct caacaccacc atggaccacc ttaatgagta cgcaggggaa
1200
gggctgagga ccctgggtgct ggccctacaag gatctggatg aagagtacta cgaggagtgg
1260
gctgagcgac gcctccaggc cagcctggcc caggacagcc gggaggacag gctggctagc
1320
atctatgagg aggttgagaa caacatgatg ctgctgggtg caacggccat tgaggacaaa
1380
cttcagcaag gggttccaga gaccattgcc ctctgacac tggccaacat caagatttgg
1440
gtgctaaccg gagacaagca agagacggct gtgaacatcg gctattcctg caagatgctg
1500
acggatgaca tgactgaggt tttcatagtc actggccata ctgtcctgga ggtgcgggag
1560
gagntcagg aaagcccggg agaagatgat ggactcatn nccgctccgt aggcaacggc
1620
ttcacctatc aggacaagct ttcttcttcc aagctaactt ctgtcctgga ggccgttgct
1680
ggggagtacg ccctgggtcat aaatggtcac agcctggccc acgcaactgga ggcagacatg
1740
gagctggagt ttctggagac agcgtgtgcc tgcaaagctg tcatctgctg ccgggtgacc
1800
cccttgacaga aggcacaggt ggtagaactg gtcaagaagt acaagaaggc tgtgacgctt
1860
gccattggag acggagccaa tgatgtcagc atgatcaaaa cggctcacat tgggtgtggg
1920
atcagtgggc aggaagggat ccaggctgtc ttggcctccg attactcctt ctcccagttc
1980
aagtctctgc agcgctcctt gctgggtgcat gggcgctggc cctacctgag aatgtgcaag
2040
ttcttttgc atttcttcta caaaaacttt gctttcacca tggteactt ctggtttggc
2100
ttcttctgtg gcttctcagc ccagaccgtc tatgaccagt atttcatcac cctgtataac
2160

atcgtgtaca cctccctgcc agtcctggct atgggggtct ttgatcagga tgtccccgag
2220
cagcggagca tggagtaccc taagctgtat gagccgggcc agctgaacct tctcttcaac
2280
aagcgggagt tcttcatctg catcgcccag ggcattctaca cctccgtgct catgttcttc
2340
attccctatg ggggtgttgc tgatgccacc cgggatgatg gcactcagct ggctgactac
2400
cagtcctttg cagtcactgt ggccacatcc ttggtcattg tggttagcgt gcagattggg
2460
ctcgacacag gctactggac ggccatcaac cacttcttca tctggggaag ccttgctggt
2520
tactttgcca tcctctttgc catgcacagc aatgggctct tcgacatggt tcccaaccag
2580
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2640
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<210> 2356

<211> 1000

<212> PRT

<213> Homo sapiens

<400> 2356

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          20          25          30
Leu Ser Asn Gln Asn Met Leu Leu Arg Gly Cys Val Leu Arg Asn Thr
          35          40          45
Glu Trp Cys Phe Gly Leu Val Ile Phe Ala Gly Pro Asp Thr Lys Leu
          50          55          60
Met Gln Asn Ser Gly Arg Thr Lys Phe Lys Arg Thr Ser Ile Asp Arg
65          70          75          80
Leu Met Asn Thr Leu Val Leu Trp Ile Phe Gly Phe Leu Val Cys Met
          85          90          95
Gly Val Ile Leu Ala Ile Gly Asn Ala Ile Trp Glu His Glu Val Gly
          100          105          110
Met Arg Phe Gln Val Tyr Leu Pro Trp Asp Glu Ala Val Asp Ser Ala
          115          120          125
Phe Phe Ser Gly Phe Leu Ser Phe Trp Ser Tyr Ile Ile Ile Leu Asn
          130          135          140
Thr Val Val Pro Ile Ser Leu Tyr Val Ser Val Glu Val Ile Arg Leu
145          150          155          160
Gly His Ser Tyr Phe Ile Asn Trp Asp Lys Lys Met Phe Cys Met Lys
          165          170          175
Lys Arg Thr Pro Ala Glu Ala Arg Thr Thr Thr Leu Asn Glu Glu Leu
          180          185          190
Gly Gln Val Glu Tyr Ile Phe Ser Asp Lys Thr Gly Thr Leu Thr Gln
          195          200          205
Asn Ile Met Val Phe Asn Lys Cys Ser Ile Asn Gly His Ser Tyr Gly
          210          215          220
Asp Val Phe Asp Val Leu Gly His Lys Ala Glu Leu Gly Glu Arg Pro
225          230          235          240
Glu Pro Val Asp Phe Ser Phe Asn Pro Leu Ala Asp Lys Lys Phe Leu
          245          250          255
Phe Trp Asp Pro Ser Leu Leu Glu Ala Val Lys Ile Gly Asp Pro His
          260          265          270
Thr His Glu Phe Phe Arg Leu Leu Ser Leu Cys His Thr Val Met Ser
          275          280          285
Glu Glu Lys Asn Glu Gly Glu Leu Tyr Tyr Lys Ala Gln Ser Pro Asp
          290          295          300
Glu Gly Ala Leu Val Thr Ala Ala Arg Asn Phe Gly Phe Val Phe Arg
305          310          315          320
Ser Arg Thr Pro Lys Thr Ile Thr Val His Glu Met Gly Thr Ala Ile
          325          330          335
Thr Tyr Gln Leu Leu Ala Ile Leu Asp Phe Asn Asn Ile Arg Lys Arg
          340          345          350
Met Ser Val Ile Val Arg Asn Pro Glu Gly Lys Ile Arg Leu Tyr Cys
          355          360          365
Lys Gly Ala Asp Thr Ile Leu Leu Asp Arg Leu His His Ser Thr Gln
          370          375          380
Glu Leu Leu Asn Thr Thr Met Asp His Leu Asn Glu Tyr Ala Gly Glu
385          390          395          400
Gly Leu Arg Thr Leu Val Leu Ala Tyr Lys Asp Leu Asp Glu Glu Tyr
          405          410          415
Tyr Glu Glu Trp Ala Glu Arg Arg Leu Gln Ala Ser Leu Ala Gln Asp

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1721

850 855 860
 Gly Asn Ala Gln Asn Thr Leu Ala Gln Pro Thr Val Trp Leu Thr Ile
 865 870 875 880
 Val Leu Thr Thr Val Val Cys Ile Met Pro Val Val Ala Phe Arg Phe
 885 890 895
 Leu Arg Leu Asn Leu Lys Pro Asp Leu Ser Asp Thr Val Arg Tyr Thr
 900 905 910
 Gln Leu Val Arg Lys Lys Gln Lys Ala Gln His Arg Cys Met Arg Arg
 915 920 925
 Val Gly Arg Thr Gly Ser Arg Arg Ser Gly Tyr Ala Phe Ser His Gln
 930 935 940
 Glu Gly Phe Gly Glu Leu Ile Met Ser Gly Lys Asn Met Arg Leu Ser
 945 950 955 960
 Ser Leu Ala Leu Ser Ser Phe Thr Thr Arg Ser Ser Ser Trp Ile
 965 970 975
 Glu Ser Leu Arg Arg Lys Lys Ser Asp Ser Ala Ser Ser Pro Ser Gly
 980 985 990
 Gly Ala Asp Lys Pro Leu Lys Gly
 995 1000

<210> 2357

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2357

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 120
 ggtgcgcaa acggtgaaga cgaggtttcc cgcaagctca tcaccgtgtg ggggtctgag
 180
 ccacaaaacc cactcctgcc agccgacacc aatgaaaccg gcggcacgaa agtcatcacc
 240
 gccttggttcg ccggcctggt gtattacgac gccgacggca aaaccataa tgatgtggcc
 300
 aaatccattg acttcgatgg cgaccgcacc tacacggtga cgctgcggaa aaccagattc
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 408

<210> 2358

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2358

Tyr Gly Gly Ala Pro Asn Gly Glu Asp Glu Val Ser Arg Lys Leu Ile
 1 5 10 15
 Thr Val Trp Gly Ala Glu Pro Gln Asn Pro Leu Leu Pro Ala Asp Thr
 20 25 30
 Asn Glu Thr Gly Gly Thr Lys Val Ile Thr Ala Leu Phe Ala Gly Leu
 35 40 45
 Val Tyr Tyr Asp Ala Asp Gly Lys Thr His Asn Asp Val Ala Lys Ser


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      50              55              60
Ile Asp Phe Asp Gly Asp Arg Thr Tyr Thr Val Thr Leu Arg Lys Thr
65              70              75              80
Arg Phe Ala Asp Gly Thr Glu Val Lys Ala His Asn Phe Val Lys Ala
      85              90              95
Ala Ala

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<210> 2359
 <211> 324
 <212> DNA
 <213> Homo sapiens

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<400> 2359
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120
accaatcacg aagggcaaat gattgaatgg attcaccacg cccgtagaag gattgcgggg
180
attgtgatca atccaggagc atggacccat acatcggcag ccatccacga tgcgttgatt
240
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300
aggcattttt cctacgtgtc acgc
324

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<210> 2360
 <211> 108
 <212> PRT
 <213> Homo sapiens

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<400> 2360
Asn Leu Asn Met Leu Gly Leu Arg Glu Pro Glu Val Tyr Gly Ser Glu
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Thr Leu Ala Asp Val Glu Gln Thr Cys Arg Glu Tyr Gly Glu Glu Leu
      20              25              30
Gly Leu Val Ile Glu Phe Gln Gln Thr Asn His Glu Gly Gln Met Ile
      35              40              45
Glu Trp Ile His His Ala Arg Arg Arg Ile Ala Gly Ile Val Ile Asn
      50              55              60
Pro Gly Ala Trp Thr His Thr Ser Ala Ala Ile His Asp Ala Leu Ile
65              70              75              80
Ala Ala Glu Val Pro Val Ile Glu Val His Ile Ser Asn Val His Arg
      85              90              95
Arg Glu Asp Phe Arg His Phe Ser Tyr Val Ser Arg
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<210> 2361
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 2361

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 120
 gatcaacaca gaccagctgg tcaaggggga cctccatccc tgccctgtcc tcacggagct
 180
 gtagggagag tcccaaaggc aggtgggtggg gctggggcct ccaacagctg ggtcctctca
 240
 tatcacttaa ggcccaacag cacacagtct cccaagtgtg ccaggtgcca caacacggcc
 300
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 398

<210> 2362

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2362

Met	Pro	Leu	Pro	Ser	Arg	Ser	Thr	Gln	Thr	Ser	Trp	Ser	Arg	Gly	Thr
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Ser	Ile	Pro	Ala	Leu	Ser	Ser	Arg	Ser	Cys	Arg	Glu	Ser	Pro	Lys	Gly
		20					25						30		
Arg	Trp	Trp	Gly	Trp	Gly	Leu	Gln	Gln	Leu	Gly	Pro	Leu	Ile	Ser	Leu
	35					40						45			
Lys	Ala	Gln	Gln	His	Thr	Val	Ser	Gln	Val	Cys	Gln	Val	Pro	Gln	His
	50					55					60				
Gly	His	Pro	Ala	Leu	Thr	Ala	Pro	Pro	Arg	Leu	Pro	Ala	Cys	His	His
65					70					75				80	
Leu	His	Lys	His	Met	Leu	Gln	Leu	His	Thr	Arg	Glu	Thr	Pro	His	Ala
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Arg Phe

<210> 2363

<211> 833

<212> DNA

<213> Homo sapiens

<400> 2363

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 tcctttccca ccttctcaga actttctgtt tccatggcct cctctgccac ctctgccacc
 180
 tcccctgatg tgctggcctc cgtttccatc gcttccctcat ggcggtcttc cgccgggtgt
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 300
 ggactggcag cggtgccatc tgggagtctg tgtgctcagc ctccgagtgc aggtttcccc
 360

ggccctgct gtggtgctag gtcccagat gagagatcac ggtcatgaag atcagcccc
 420
 aaggcagccc ctccnttcc agcctgggct ctggcgtgtt ctaggtgctc acttccatgg
 480
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 720
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 833

<210> 2364
 <211> 135
 <212> PRT
 <213> Homo sapiens

<400> 2364
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 Lys His His Gln Gln His Lys Gly Arg Ser Gln Glu Pro Glu Leu Thr
 20 25 30
 Ser Leu Pro Pro Ser Ser Glu Val Ser Phe Pro Thr Phe Ser Glu Leu
 35 40 45
 Ser Val Ser Met Ala Ser Ser Ala Thr Ser Ala Thr Ser Pro Asp Val
 50 55 60
 Leu Ala Ser Val Ser Ile Ala Ser Ser Trp Arg Ser Ser Ala Arg Cys
 65 70 75 80
 Ser Lys Pro Thr Ala Xaa Arg Ser Lys Arg Asp Cys Val Thr Thr Gln
 85 90 95
 Lys Val Ala Gln Gly Leu Ala Ala Val Pro Ser Gly Ser Leu Cys Ala
 100 105 110
 Gln Pro Pro Ser Ala Gly Phe Pro Gly Pro Cys Cys Gly Ala Arg Ser
 115 120 125
 Pro Asp Glu Arg Ser Arg Ser
 130 135

<210> 2365
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 2365
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atggtgatgg gactcgggtt ccaaccacgg ttccatgtga cccagacagt tctggttggc
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 300
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 ggaacgcgt
 429

<210> 2366

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2366

Met	Ala	Arg	Cys	Gly	Leu	Asn	His	Leu	Glu	Leu	Tyr	Gly	Glu	Ala	Gly
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Phe	Ala	Tyr	Arg	Gly	Glu	Glu	Glu	Val	Trp	Ala	Asp	Arg	Ser	Pro	Val
			20					25					30		
Thr	Ala	Glu	Asp	Met	Arg	Trp	Leu	Asp	Gly	Leu	Cys	Arg	Gly	Arg	Gly
			35				40					45			
Ile	Glu	Leu	Gly	Ala	Asn	Gln	Asn	Cys	Leu	Gly	His	Met	Glu	Pro	Trp
	50				55				60						
Leu	Glu	Thr	Glu	Ser	His	His	Arg	Cys	Glu	Asn	Pro	Asp	Gly	Val	
65				70				75					80		
Asp	Leu	Pro	Trp	Gly	Val	His	Ala	Arg	Ala	Ser	Thr	Leu	Ala	Pro	Val
			85					90					95		
Pro	Glu	Asn	Leu	Asp	Phe	Val	Gln	Arg	Leu	Leu	Gly	Glu	Leu	Thr	Glu
			100					105					110		
Thr	Val	Ser	Ser	Lys	Phe	Leu	Asn	Val	Gly	Leu	Asp	Glu	Pro	Trp	Glu
			115				120						125		
Leu	Gly	Thr	Gly												
			130												

<210> 2367

<211> 474

<212> DNA

<213> Homo sapiens

<400> 2367

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 ggggggtcacg agctcaccga cgcgcgcgcg ttgcctcgt ggggcgtcga tttcgtcaaa
 120
 tacgatcggg gtcctgggtga ctccgcgcac gacgaccagg tcgcctcgtt caccgcgatg
 180
 cgtgacgcaa tccgatccac cggacgcccc atggtgtaca gcatcaaccc caacagcgaa
 240
 tcgccggatc ggtccggagc ccaattcgat tggggcgggtg tggcaaccat gacacgtacc
 300
 accaacgaca tctcgcgggt gtggaccact cggccggcgg gtgccgatgc gacaccggca
 360

tcggggtatc aggggatccg cgacatcate gacgccgtgg ccccgatcgg cgcacggggt
 420
 gcgacggcag cttcgtcgac atggacatgc tcgtcgtcgg tgcggcaac gcgt
 474

<210> 2368
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 2368
 Xaa Ala Arg Glu Lys Thr Cys Ala Gln Phe Gly Gly Thr Tyr Pro Gly
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 Ser Ala Gly Ser Gly Gly His Glu Leu Thr Asp Ala Arg Ala Phe Ala
 20 25 30
 Ser Trp Gly Val Asp Phe Val Lys Tyr Asp Arg Cys Ser Gly Asp Ser
 35 40 45
 Ala His Asp Asp Gln Val Ala Ser Phe Thr Ala Met Arg Asp Ala Ile
 50 55 60
 Arg Ser Thr Gly Arg Pro Met Val Tyr Ser Ile Asn Pro Asn Ser Glu
 65 70 75 80
 Ser Pro Asp Arg Ser Gly Ala Gln Phe Asp Trp Gly Gly Val Ala Thr
 85 90 95
 Met Thr Arg Thr Thr Asn Asp Ile Ser Pro Val Trp Thr Thr Arg Pro
 100 105 110
 Ala Gly Ala Asp Ala Thr Pro Ala Ser Gly Tyr Gln Gly Ile Arg Asp
 115 120 125
 Ile Ile Asp Ala Val Ala Pro Ile Gly Ala Arg Val Ala Thr Ala Ala
 130 135 140
 Ser Ser Thr Trp Thr Cys Ser Ser Ser Val Ser Ala Thr Arg
 145 150 155

<210> 2369
 <211> 408
 <212> DNA
 <213> Homo sapiens

<400> 2369
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 120
 gtgcctcccc caacccagc caggacttcg tccatcccag ttcaggaagc acaagaggct
 180
 cccgaaagga agagggggcc accaagaagg ctcccagccg actcccactg cctcccagct
 240
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 300
 ggggagctca agccacagc accagccagc ccaaggcttg gccagtccca gtcccaagca
 360
 gatgaacgag ctgggactcc gcctccagcc cctcccctgc cccctcct
 408

<210> 2370

<211> 136
 <212> PRT
 <213> Homo sapiens

<400> 2370
 Leu Asn Gly Arg Gln Ala Glu Ala Thr Arg Ala Ser Pro Pro Arg Ser
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 Pro Ala Glu Pro Lys Gly Ser Ala Leu Gly Pro Asn Pro Glu Pro His
 20 25 30
 Leu Thr Phe Pro Arg Ser Phe Lys Val Pro Pro Pro Thr Pro Val Arg
 35 40 45
 Thr Ser Ser Ile Pro Val Gln Glu Ala Gln Glu Ala Pro Glu Arg Lys
 50 55 60
 Arg Gly Pro Pro Arg Arg Leu Pro Ala Asp Ser His Cys Leu Pro Ala
 65 70 75 80
 Ser Thr Ser Ala Pro Pro Arg Ser Thr Gln Thr Gly Pro Pro Ser
 85 90 95
 Xaa Asp Cys Pro Gly Glu Leu Lys Ala Thr Ala Pro Ala Ser Pro Arg
 100 105 110
 Leu Gly Gln Ser Gln Ser Gln Ala Asp Glu Arg Ala Gly Thr Pro Pro
 115 120 125
 Pro Ala Pro Pro Leu Pro Pro Pro
 130 135

<210> 2371
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 2371
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 120
 ggcaggcact agtcatgagg caagagatgc ctcagaagag gatgctggcc gcagggcaca
 180
 gcagagaggg agatagcccc gggcactcct caggaccggg cctcagggga cagcaaaca
 240
 gattcctgat agacgcgccc aggtcatgcc ttttcagtgg tgtgagccag gttctggcgt
 300
 caggcgggcc aaggttttca tgcagcn
 327

<210> 2372
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 2372
 Met Arg Ala Cys Ser Leu Gly Ala Glu Thr Arg Ser Lys Gly Gly Glu
 1 5 10 15
 Arg Val Ala Arg Ala Pro Ser Tyr Ser Trp Ser Cys Arg Gly Pro Ile
 20 25 30
 Pro Arg Glu Arg Gln Ala Leu Val Met Arg Gln Glu Met Pro Gln Lys

35 40 45
 Arg Met Leu Ala Ala Gly His Ser Arg Glu Gly Asp Ser Pro Gly His
 50 55 60
 Ser Ser Gly Pro Gly Leu Arg Gly Gln Gln Thr Arg Phe Leu Ile Asp
 65 70 75 80
 Ala Pro Arg Ser Cys Leu Phe Ser Gly Val Ser Gln Val Leu Ala Ser
 85 90 95
 Gly Gly Pro Arg Phe Ser Cys Ser
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<210> 2373
 <211> 591
 <212> DNA
 <213> Homo sapiens

<400> 2373
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 aaaatcctgtc tattctgaaa agcggccaat gccagactca tctcatgatg tgaaagttct
 120
 cacttcaaag acatcagctg ttgagatgac ccaggcagta ttgaatactc agctttcattc
 180
 agaaaatggt accaaagtgt agcaaaattc accagcagtt tgtgaaacaa tttctgttcc
 240
 caagtccatg tccactgagg aatataaatc aaaaattcaa aatgaaaata tgctacttct
 300
 cgctttgctt tcacaggcac gtaagactca gaagacagta ttaaaagatg ctaatcaaac
 360
 tattcaggat tctaaaccag acagttgtga aatgaatcca aatacccaaa tgactggtaa
 420
 ccaactgaat ttgaagaaca tggaaactcc aagtacttct aatgtaagtg gcagggtttt
 480
 ggacaactcc ttttgcagtg gacaagaatc ctcaacaaaa ggaatgcctg ctaaaagtga
 540
 cagtagctgt tccatggaag tgctagcaac ctgtctttcc ctgtggaaaa a
 591

<210> 2374
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 2374
 Met Pro Asp Ser Ser His Asp Val Lys Val Leu Thr Ser Lys Thr Ser
 1 5 10 15
 Ala Val Glu Met Thr Gln Ala Val Leu Asn Thr Gln Leu Ser Ser Glu
 20 25 30
 Asn Val Thr Lys Val Glu Gln Asn Ser Pro Ala Val Cys Glu Thr Ile
 35 40 45
 Ser Val Pro Lys Ser Met Ser Thr Glu Glu Tyr Lys Ser Lys Ile Gln
 50 55 60
 Asn Glu Asn Met Leu Leu Leu Ala Leu Leu Ser Gln Ala Arg Lys Thr
 65 70 75 80
 Gln Lys Thr Val Leu Lys Asp Ala Asn Gln Thr Ile Gln Asp Ser Lys

				85						90					95				
Pro	Asp	Ser	Cys	Glu	Met	Asn	Pro	Asn	Thr	Gln	Met	Thr	Gly	Asn	Gln				
			100					105					110						
Leu	Asn	Leu	Lys	Asn	Met	Glu	Thr	Pro	Ser	Thr	Ser	Asn	Val	Ser	Gly				
		115					120					125							
Arg	Val	Leu	Asp	Asn	Ser	Phe	Cys	Ser	Gly	Gln	Glu	Ser	Ser	Thr	Lys				
	130					135					140								
Gly	Met	Pro	Ala	Lys	Ser	Asp	Ser	Ser	Cys	Ser	Met	Glu	Val	Leu	Ala				
145					150					155					160				
Thr	Cys	Leu	Ser	Leu	Trp	Lys													
				165															

<210> 2375

<211> 535

<212> DNA

<213> Homo sapiens

<400> 2375

```

ntggccatgt cgttgctcag cagcggcacc ctggacagtt accttgagcg tcacaaacaa
60
ctggacgcga tgcgcacgct gcacttcttc gccctcgacg aagaaaaccc cgccagcatc
120
tataactgcc tgcgcgccgc gcggggcaat gccacgcggg tacgcggggc gatcacccgc
180
gacatgtggg aaaacctcaa cgccacctgg ctggaaatgc gcagcatcgc cgccgggggc
240
ctggcccggc atggcatcag ccacttctgt gactgggtca agcagcgctt gcacctgttc
300
cgcgggggcaa cctcgggcac catcatgcgc aacgacgctt accggtttat tcgcctgggc
360
acgtttgtcg agcgcgcgga caacaccctg cgcctgctgg atgcgcgcta cgaaatgttt
420
ggtgaggagt cggaagaggt cagcgacctg tcggcacgcg ggtattacca gtggagcgcc
480
ctgctgcggg ccttgctcgc attcgaggcg tataccgaac tgtaccccaa cgcgt
535

```

<210> 2376

<211> 178

<212> PRT

<213> Homo sapiens

<400> 2376

Xaa	Ala	Met	Ser	Leu	Leu	Ser	Ser	Gly	Thr	Leu	Asp	Ser	Tyr	Leu	Glu				
1			5					10					15						
Arg	His	Lys	Gln	Leu	Asp	Ala	Met	Arg	Met	Leu	His	Phe	Phe	Ala	Leu				
		20					25					30							
Asp	Glu	Glu	Asn	Pro	Ala	Ser	Ile	Tyr	Asn	Cys	Leu	Arg	Ala	Ala	Arg				
	35					40					45								
Gly	Asn	Ala	His	Ala	Val	Arg	Gly	Arg	Ile	Thr	Ala	Asp	Met	Trp	Glu				
50					55				60										
Asn	Leu	Asn	Ala	Thr	Trp	Leu	Glu	Met	Arg	Ser	Ile	Ala	Ala	Gly	Gly				
65			70				75				80								
Leu	Ala	Arg	His	Gly	Ile	Ser	His	Phe	Cys	Asp	Trp	Val	Lys	Gln	Arg				

<400> 2378

Met	Ser	Phe	Ile	Met	Pro	Leu	Lys	Ser	Phe	Arg	Ala	Lys	Asn	Ile	Ile
1				5					10					15	
Phe	Thr	Phe	Gln	Phe	Tyr	Val	Cys	Gln	Ser	Ile	Leu	Phe	Tyr	Ala	Phe
			20					25					30		
Ser	Cys	Ile	His	Ile	Phe	Lys	Asn	Ile	Ser	Pro	Asn	Arg	Lys	Ile	Pro

```

      35              40              45
Thr Ser Ile Cys Trp Phe His Phe Ile Arg Arg Val Lys Tyr Phe Phe
      50              55              60
Met Ser His His His Arg Ser Phe Pro Phe Val Cys Gln Gly Leu Ile
65              70              75              80
Ser Leu Val Gln Asp His Pro Gly Leu Val Pro Phe Ile Ser Trp Val
      85              90              95
Leu Pro Gln Lys Gly Ala Ser Val Leu Pro Tyr His Phe
      100              105

```

<210> 2379

<211> 342

<212> DNA

<213> Homo sapiens

<400> 2379

```

tcatgacctg gagacttcgg aaactcaaca agactgcagg gcacccaggg gcaccagccc
60
cggtcaccgc agaggatcag tgcactttgc catctggcag atcaactcat ggcacaactg
120
ggaaacataa cattcacgct tgtgaaccga gacgccatac cccagcgggtg ccgagagcaa
180
cagtgtctgtg caggtctggg cagatgaggg cctccaggac acgaggactc actcgctcac
240
cctgcccact gggcagctgc tcgccactcc cctcctggag ggcaggacgg acaccacaca
300
cacacacaag caggaagct gtgcagcagt ggggagaaag ca
342

```

<210> 2380

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2380

```

Met Thr Trp Arg Leu Arg Lys Leu Asn Lys Thr Ala Gly His Pro Gly
1      5      10      15
Ala Pro Ala Pro Val Thr Ala Glu Asp Gln Cys Thr Leu Pro Ser Gly
      20      25      30
Arg Ser Thr His Gly Thr Thr Gly Lys His Asn Ile His Ala Cys Glu
      35      40      45
Pro Arg Arg His Thr Pro Ala Val Pro Arg Ala Thr Val Leu Cys Arg
      50      55      60
Ser Gly Gln Met Arg Ala Ser Arg Thr Arg Gly Leu Thr Arg Ser Pro
65      70      75      80
Cys Pro Leu Gly Ser Cys Ser Pro Leu Pro Ser Trp Arg Ala Gly Arg
      85      90      95
Thr Pro His Thr His Thr Ser Arg Glu Ala Val Gln Gln Trp Gly Glu
      100      105      110
Ser

```

<210> 2381

<211> 434

<212> DNA

<213> Homo sapiens

<400> 2381

gtgcaccctg gccatatgga cgccagcgac gtcggcgctt tgcgtgacgt ggaaccgatc
 60
 ggcccaagta gagagatgga ttttgaatgg tgacgatgta cccgccgcag caagtggatg
 120
 ccgtcctctt tgacatggac ggaaccctgc tcaacacctt gccggcctgg tgcgtggcat
 180
 ctgagcatct gtggggcact tctctggctg acgtgacag cgccaagggt gacgggggca
 240
 ccgtcgacga cgtcgttgag ctgtatctgc gagaccaccc tcaggcagat cccagggcca
 300
 ccacgagcgg tttcatggac atccttgacg ccaacctggc tggccacacc gagccgatgc
 360
 ccggagctga ccgcctcgtg aagaggctgt caggatcatgt acccatcgct gtggtgtcga
 420
 attccccgac gcgt
 434

<210> 2382

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2382

Met	Val	Thr	Met	Tyr	Pro	Pro	Gln	Gln	Val	Asp	Ala	Val	Leu	Phe	Asp
1				5					10					15	
Met	Asp	Gly	Thr	Leu	Leu	Asn	Thr	Leu	Pro	Ala	Trp	Cys	Val	Ala	Ser
			20					25					30		
Glu	His	Leu	Trp	Gly	Thr	Ser	Leu	Ala	Asp	Ala	Asp	Ser	Ala	Lys	Val
		35				40					45				
Asp	Gly	Gly	Thr	Val	Asp	Asp	Val	Val	Glu	Leu	Tyr	Leu	Arg	Asp	His
	50				55				60						
Pro	Gln	Ala	Asp	Pro	Gln	Ala	Thr	Ile	Glu	Arg	Phe	Met	Asp	Ile	Leu
65				70					75					80	
Asp	Ala	Asn	Leu	Ala	Gly	His	Thr	Glu	Pro	Met	Pro	Gly	Ala	Asp	Arg
			85					90					95		
Leu	Val	Lys	Arg	Leu	Ser	Gly	His	Val	Pro	Ile	Ala	Val	Val	Ser	Asn
		100					105						110		
Ser	Pro	Thr	Arg												
		115													

<210> 2383

<211> 393

<212> DNA

<213> Homo sapiens

<400> 2383

acgcgtgcgt tcagatgagc gccggacgaa actcctcggt cgcttcggca ggcattggatt
 60
 catgtcggca cgggcctttg aacaggatcg ccgtcgcgtg gctatccgcc gcgggtgggg
 120

cagaaaaacgc ccactctccc ttccccaggc gccggccgtc gagtcgtcta cgcaacgcac
 180
 gtctacatag gtgacttttt cataccccc ctttcgtact cggatgggct cggcgtgctc
 240
 gatgtcggca cgaaaaatta aatgcactga atgcgggttg tcgcacagga tgcattctgt
 300
 ctttcttgat gccacccacc ttgttacata ttctgccatg caaaacacct tgtgattttt
 360
 ggcggagtgc aacatgggtat gtgtatgccca ctg
 393

<210> 2384
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 2384
 Met Leu His Ser Ala Lys Asn His Lys Val Phe Cys Met Ala Glu Tyr
 1 5 10 15
 Val Thr Arg Trp Val Ala Ser Arg Lys Thr Arg Cys Ile Leu Cys Asp
 20 25 30
 Asn Pro His Ser Val His Leu Ile Phe Arg Ala Asp Ile Glu His Ala
 35 40 45
 Glu Pro Ile Arg Val Arg Lys Trp Gly Tyr Glu Lys Val Thr Tyr Val
 50 55 60
 Asp Val Arg Cys Val Asp Asp Ser Thr Ala Gly Ala Trp Gly Arg Glu
 65 70 75 80
 Ser Gly Arg Phe Leu Pro His Pro Arg Arg Ile Ala Thr Arg Arg Arg
 85 90 95
 Ser Cys Ser Lys Ala Arg Ala Asp Met Asn Pro Cys Leu Pro Lys Arg
 100 105 110
 Pro Arg Ser Phe Val Arg Arg Ser Ser Glu Arg Thr Arg
 115 120 125

<210> 2385
 <211> 347
 <212> DNA
 <213> Homo sapiens

<400> 2385
 acgcgttccc aaagtaggat ggctgggata gagggaaagg acatctttca ggcttggtat
 60
 gcactgtgct gtggactctt gttgtggggt cctaggtctg cccagcattt tggggttcac
 120
 cccgtgaccc tctacggggt tccatgcccc cagcaccacg tccatcatca tttctggggt
 180
 cccctcacct cagagagcct gcttcctatg actgcgtggg ccagctggag aaggacgacc
 240
 caagaccctt caagtttctg tgtcctgacc ccaagcatag gcctgagtgc tcctggggcc
 300
 caagggcctt tacgcactac tctctggggc ccactgtctg cactctt
 347

<210> 2386

<211> 109
 <212> PRT
 <213> Homo sapiens

<400> 2386
 Met Ala Gly Ile Glu Gly Lys Asp Ile Phe Gln Ala Cys Tyr Ala Leu
 1 5 10 15
 Cys Cys Gly Leu Leu Leu Trp Gly Pro Arg Ser Ala Gln His Phe Gly
 20 25 30
 Val His Pro Val Thr Leu Tyr Gly Phe Pro Cys Pro Gln His His Val
 35 40 45
 His His His Phe Trp Gly Pro Leu Thr Ser Glu Ser Leu Leu Pro Met
 50 55 60
 Thr Ala Trp Ala Ser Trp Arg Arg Thr Thr Gln Asp Pro Ser Ser Phe
 65 70 75 80
 Cys Val Leu Thr Pro Ser Ile Gly Leu Ser Ala Pro Gly Ala Gln Gly
 85 90 95
 Pro Leu Arg Thr Thr Leu Trp Gly Pro Leu Ser Ala Leu
 100 105

<210> 2387
 <211> 715
 <212> DNA
 <213> Homo sapiens

<400> 2387
 ncggccgcac ttcaccttac ggaggggaga taatgagatc aattagaggc gccgtcaccg
 60
 cgccggagac agctgccgcc gcatagtaat caccgcggg ctgggtgcgc gggggctccc
 120
 cgctacctgc gcgcctgctg ctcccaccac gcggcaccga cccggggcgcg ccccgggccc
 180
 ctgtccgcag cccacagcca caccgcgcac cctacaccct ccttgcgctt ctgctgggga
 240
 gctcaccccc tccactcgca cagtgcgctg cggcccgggg tgtgggaggt cccgggactt
 300
 ggggtgtgag tgctgtgtg ggggtagggg caggtgtccg cttgtgcgca tatgggcatg
 360
 agtgtacatg gcgtgtgcct ggagatgggc gagtgcaggc tggaatgtgc cggcgtggca
 420
 cgtgtgtggg cccaaataga tgcgtgtgtg atcacatgtt gtgttcgtgt ttgcacctcg
 480
 tgtgcctgtg tgtccgtatt tgagtgttta caggaatgtg ggtgggtgagt acccgatatg
 540
 ggggtcatct gcacttgtgc gtgtgtgtgt gtagggcgt gtgtgtgcgt gtgtgtgtta
 600
 ngggatacgt gtagatgtgc attagtgtga ctgtgtgtgc tcatgtgcct gtgcacgtgt
 660
 gtttgaggtt tgtgtgcatg ggtagcgtct gtgagagcca tgtgtatatc tgcag
 715

<210> 2388
 <211> 58
 <212> PRT

<213> Homo sapiens

<400> 2388

```

Met Gly Met Ser Val His Gly Val Cys Leu Glu Met Gly Glu Cys Arg
 1           5           10          15
Leu Glu Cys Ala Gly Val Ala Arg Val Trp Ala Gln Ile Asp Ala Cys
      20           25           30
Val Ile Thr Cys Cys Val Arg Val Cys Thr Ser Cys Ala Cys Val Ser
      35           40           45
Val Phe Glu Cys Leu Gln Glu Cys Gly Trp
      50           55

```

<210> 2389

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2389

```

ntcaccctgc cgccggaagg ttgctcgtac cgcattggcca tcgtcaccat gaagaagtcg
60
tatccggggcc acgccaagcg cgtcatgttg ggtgtctggt cgtttttgcg acagttcatg
120
tataccaagt tcgttatcgt caccgacgac gatatcaacg cccgcgactg gaacgacgtg
180
atctggggcca tcaccacgcg catggacccc aagcgcgaca cggatgatgat cgataacacg
240
ccgatcgact acctcgactt cgctcgccg gtgtccggcc tgggttcgaa gatggggctc
300
gatccacgac acaaatggcc cggccacacc acccgn
336

```

<210> 2390

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2390

```

Xaa Thr Leu Pro Pro Glu Gly Cys Ser Tyr Arg Met Ala Ile Val Thr
 1           5           10          15
Met Lys Lys Ser Tyr Pro Gly His Ala Lys Arg Val Met Leu Gly Val
      20           25           30
Trp Ser Phe Leu Arg Gln Phe Met Tyr Thr Lys Phe Val Ile Val Thr
      35           40           45
Asp Asp Asp Ile Asn Ala Arg Asp Trp Asn Asp Val Ile Trp Ala Ile
      50           55           60
Thr Thr Arg Met Asp Pro Lys Arg Asp Thr Val Met Ile Asp Asn Thr
      65           70           75           80
Pro Ile Asp Tyr Leu Asp Phe Ala Ser Pro Val Ser Gly Leu Gly Ser
      85           90           95
Lys Met Gly Leu Asp Pro Thr His Lys Trp Pro Gly His Thr Thr Arg
      100          105          110

```

<210> 2391

<211> 388

<212> DNA

<213> Homo sapiens

<400> 2391

gtcgactaac ctgcgtacag ccgccaccct acgttttagtc gcgaagcgtg tcgggtccat
60
gttcattccg gagctacacc atgaataaag tactacctga tccacccatc gatcccgcaa
120
aagaccgcgt cgctttcaac cgcgccatcg accattacct gcctaccag ggcttccact
180
gcgtcaacga agacctgagt ttcgaagacg ccctgctcta caccgccagc ctgctcgaca
240
gtgcctctgc cacggcgctg gattgcgggtg agctgctgca aagccctgaa cgggcgaaga
300
tcctggccgt gtggcatttg ctggaaattg caaaaaccac cgtagatcgc ttccccatcg
360
agtgcctgac cgcaccaaag ccctgcct
388

<210> 2392

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2392

Met Asn Lys Val Leu Pro Asp Pro Pro Ile Asp Pro Ala Lys Asp Arg
1 5 10 15
Val Ala Phe Asn Arg Ala Ile Asp His Tyr Leu Pro Thr Gln Gly Phe
20 25 30
His Cys Val Asn Glu Asp Leu Ser Phe Glu Asp Ala Leu Leu Tyr Thr
35 40 45
Ala Ser Leu Leu Asp Ser Ala Ser Ala Thr Ala Leu Asp Cys Gly Glu
50 55 60
Leu Leu Gln Ser Pro Glu Arg Ala Lys Ile Leu Ala Val Trp His Leu
65 70 75 80
Leu Glu Ile Ala Lys Thr Thr Val Asp Arg Phe Pro Ile Glu Cys Leu
85 90 95
Thr Ala Pro Lys Pro Cys.
100

<210> 2393

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2393

aacctgtcta ccgaggacca ggccgagcag gtagagattg tgaagcgctc tgagtccggc
60
atggtcaccg accccatcac tgcgcgcccg gatatgacca tcggggaagt agacgcgctg
120
tgcgcccgt tccgcatttc cggcctgccg gtggtagacg aggacggcac cctgatgggc
180
atttgacca cccgcgatat gcgcttcgag cctgactttg accgcaaggt cagcgaggtc
240

atgacggcta tgccgcttgt tgttgcgcg gaggggtgtat ctaagaagga agccctcgaa
 300
 ctgctctcgg ccaataaggt ggaaaagctg cccatcgctg atgcggataa taagctcacc
 360
 ggcctgatta ccgtcaagga ctttgtcaag accgagcagt accccaacgc g
 411

<210> 2394

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2394

Asn	Leu	Ser	Thr	Glu	Asp	Gln	Ala	Glu	Gln	Val	Glu	Ile	Val	Lys	Arg
1				5				10					15		
Ser	Glu	Ser	Gly	Met	Val	Thr	Asp	Pro	Ile	Thr	Ala	Arg	Pro	Asp	Met
			20					25					30		
Thr	Ile	Gly	Glu	Val	Asp	Ala	Leu	Cys	Ala	Arg	Phe	Arg	Ile	Ser	Gly
		35					40					45			
Leu	Pro	Val	Val	Asp	Glu	Asp	Gly	Thr	Leu	Met	Gly	Ile	Cys	Thr	Thr
	50					55					60				
Arg	Asp	Met	Arg	Phe	Glu	Pro	Asp	Phe	Asp	Arg	Lys	Val	Ser	Glu	Val
65					70				75					80	
Met	Thr	Ala	Met	Pro	Leu	Val	Val	Ala	Arg	Glu	Gly	Val	Ser	Lys	Lys
			85					90					95		
Glu	Ala	Leu	Glu	Leu	Leu	Ser	Ala	Asn	Lys	Val	Glu	Lys	Leu	Pro	Ile
		100						105					110		
Val	Asp	Ala	Asp	Asn	Lys	Leu	Thr	Gly	Leu	Ile	Thr	Val	Lys	Asp	Phe
		115					120					125			
Val	Lys	Thr	Glu	Gln	Tyr	Pro	Asn	Ala							
	130						135								

<210> 2395

<211> 362

<212> DNA

<213> Homo sapiens

<400> 2395

aagctttcag aggagtttgc taaagtgtta aggatttgca tattttcaac ttagtcata
 60
 tctaagtgcc ccaataaaac agcgcgggcg attgggggct ggctttcatc aacaactaac
 120
 ttagcaatat taatctgacc ttttcctggt gattgggcat ttagtaataa tgcggggcca
 180
 atatcatcat actttccaaa tatttttgat ttttagaca tcaactgaag ttgtgaccat
 240
 ttactgtctt tgtcttgatg gcaatctaaa caaacatctc ttgtattaag ttgttcactt
 300
 acccaaggat taggcactct aaaggcatga tcgcgtcgat catcgactcc catgtaacgc
 360
 gt
 362

<210> 2396


```
<211> 117
<212> PRT
<213> Homo sapiens
```

```

<400> 2396
Met Gly Val Asp Asp Arg Arg Asp His Ala Phe Arg Val Pro Asn Pro
 1          5          10          15
Trp Val Ser Glu Gln Leu Asn Thr Arg Asp Val Cys Leu Asp Cys His
          20          25          30
Gln Asp Lys Asp Ser Lys Trp Ser Gln Leu Gln Leu Met Ser Lys Lys
          35          40          45
Ser Lys Ile Phe Gly Lys Tyr Asp Asp Ile Gly Pro Ala Leu Leu Leu
          50          55          60
Asn Ala Gln Ser Pro Gly Lys Gly Gln Ile Asn Ile Ala Lys Leu Val
65          70          75          80
Val Asp Glu Ser Gln Pro Pro Met Arg Arg Ala Val Leu Leu Gly His
          85          90          95
Leu Asp Met Thr Lys Val Glu Asn Met Gln Ile Leu Asn Thr Leu Ala
          100          105          110
Asn Ser Ser Glu Ser
          115

```

```
<210> 2397
<211> 449
<212> DNA
<213> Homo sapiens
```

```

<400> 2397
nacagcacac tccgcctcct ccgacgatca tagctttcac gtcggacatg atcccccgcc
60
tagtgtacta ctggtccttc tccgtccctc cctacgggga ccacacttcc tacaccatgg
120
aagggtacat caacaacact ctctccatct tcaaagtcgc agacttcaaa aacaaaagca
180
agggaaaccc gtactctgac ctgggtaacc ataccacatg caggtatcgt gatttccgat
240
acccacctgg acacccccag gagtataaac acaacatcta ctattggcat gtgattgcag
300
ccaagctggc ttttatcatt gtcatggagc acgtcatcta ctctgtgaaa tttttcattt
360
catatgcaat tcccgatgta tcaaagcgca caaagagcaa gatccagaga gaaaaatacc
420
taacccaaaa gcttcttcat gagaatcac
449

```

```
<210> 2398
<211> 76
<212> PRT
<213> Homo sapiens
```

```

<400> 2398
Cys Thr Thr Gly Pro Ser Pro Ser Leu Pro Thr Gly Thr Thr Leu Pro
  1                      5              10              15
Thr Pro Trp Lys Gly Thr Ser Thr Thr Leu Ser Pro Ser Ser Lys Ser

```

```

          20          25          30
Gln Thr Ser Lys Thr Lys Ala Arg Glu Thr Arg Thr Leu Thr Trp Val
          35          40          45
Thr Ile Pro His Ala Gly Ile Val Ile Ser Asp Thr His Leu Asp Thr
          50          55          60
Pro Arg Ser Ile Asn Thr Thr Ser Thr Ile Gly Met
          65          70          75

```

<210> 2399
 <211> 344
 <212> DNA
 <213> Homo sapiens

```

<400> 2399
acgcgtcatg cttcacgaaa cgggtcacgc gcttcattac caagcagctg gcaaacacaa
60
cttgatatttc gagcgggttg cgccagtcga gatcatggag ttcgtggcct actgcttgca
120
gtttctgacg atcgagcgcc tggccatgtc aggggaactt tcgggtaaag aacaggaact
180
agtcaaacc tttgctggtc cggccaggct tggaggggtt cgaaaaccta caacgccaca
240
aaacgggttc agcactgggt ttataaacag cctaaaatcc cgacaagtaa agaactcgat
300
accgatggc ttgagatgcg acacacgctc ggggtggatt ggtc
344

```

<210> 2400
 <211> 112
 <212> PRT
 <213> Homo sapiens

```

<400> 2400
Met Leu His Glu Thr Gly His Ala Leu His Tyr Gln Ala Ala Gly Lys
1          5          10          15
His Asn Leu Tyr Phe Glu Arg Val Ala Pro Val Glu Ile Met Glu Phe
20          25          30
Val Ala Tyr Cys Leu Gln Phe Leu Thr Ile Glu Arg Leu Ala Met Ser
35          40          45
Gly Glu Leu Ser Gly Lys Glu Gln Glu Leu Val Lys Pro Phe Ala Gly
50          55          60
Pro Ala Arg Leu Gly Gly Val Arg Lys Pro Thr Thr Pro Gln Asn Gly
65          70          75          80
Ser Ser Thr Gly Phe Ile Asn Ser Leu Lys Ser Arg Gln Val Lys Asn
85          90          95
Ser Ile Pro Tyr Gly Leu Arg Cys Asp Thr Arg Ser Gly Trp Ile Gly
100          105          110

```

<210> 2401
 <211> 479
 <212> DNA
 <213> Homo sapiens

<400> 2401

nntaccgagg taaaactcga tagcctcggg gtcaccgacc agatgcgctc tgggcgctgc
 60
 tggatgtttg ccgcgctcaa cgtattccgc caccgcgcgg ccaaggagct caacatcgat
 120
 gactttgagt ttctctttac ctacctgcag taactcgaca aactagagcg cgccaacttc
 180
 gcgctcaacc aactgctgga tctcaccgaa gacggcaccg actgggatga ccgcgacgtg
 240
 gctacttccc tcgagctcac aggcgacgac ggcggctggg gggtcattttt caccaacctc
 300
 gtggacaagt acggcgagct cccggccgag gtcattgctg aggtgcactc gtccggccac
 360
 accgaccaga tgaatcgca tategccacc atcatccgcc gcgccgcgca ccgtgcggtg
 420
 gaaggcgagg gggatcgcg gggcatcgtc aagcaagccc gccccgatat ccaacgcgt
 479

<210> 2402

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2402

Xaa	Thr	Glu	Val	Lys	Leu	Asp	Ser	Leu	Gly	Val	Thr	Asp	Gln	Met	Arg
1				5					10					15	
Ser	Gly	Arg	Cys	Trp	Met	Phe	Ala	Ala	Leu	Asn	Val	Phe	Arg	His	Arg
			20					25					30		
Ala	Ala	Lys	Glu	Leu	Asn	Ile	Asp	Asp	Phe	Glu	Phe	Ser	Phe	Thr	Tyr
		35					40					45			
Leu	Gln	Tyr	Phe	Asp	Lys	Leu	Glu	Arg	Ala	Asn	Phe	Ala	Leu	Asn	Gln
	50					55					60				
Leu	Leu	Asp	Leu	Thr	Glu	Asp	Gly	Thr	Asp	Trp	Asp	Asp	Arg	Asp	Val
65					70				75					80	
Ala	Thr	Ser	Leu	Glu	Leu	Thr	Gly	Asp	Asp	Gly	Gly	Trp	Trp	Ser	Phe
			85					90					95		
Phe	Thr	Asn	Leu	Val	Asp	Lys	Tyr	Gly	Ala	Val	Pro	Ala	Glu	Val	Met
		100						105					110		
Pro	Glu	Val	His	Ser	Ser	Gly	His	Thr	Asp	Gln	Met	Asn	Arg	Asp	Ile
		115					120					125			
Ala	Thr	Ile	Ile	Arg	Arg	Ala	Ala	His	Arg	Ala	Val	Glu	Gly	Glu	Gly
	130					135					140				
Asp	Arg	Gly	Gly	Ile	Val	Lys	Gln	Ala	Arg	Pro	Asp	Ile	Gln	Arg	
145					150					155					

<210> 2403

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2403

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 gtgcagcgta ttgccgccga gaccggccgt gatatccgtt cgctgatcgg tgacgccgcg
 120

ttcctcaagc gcctggaccc gaagaagtac accgacgaaa ccttcggtgt gccgaccatc
 180
 accgacatcc tgcaagagct ggaaaaacct ggccgcgacc cgcgtcccga gttcaagacc
 240
 gccgagttcc aggacggtgt tgaagacctc aaggacctgc agccgggcat gatcctcgaa
 300
 ggctgtgtca ccaacgtgac caactttggc gcctttgtgg atatcggcgt gcatcaggac
 360
 ggtttgggtgc acatctctgc acttttcg
 387

<210> 2404

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2404

Xaa	Met	Asn	Gly	Asp	Asn	Pro	Leu	Asp	Ser	Ser	Ala	Val	His	Pro	Glu
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Ala	Tyr	Pro	Leu	Val	Gln	Arg	Ile	Ala	Ala	Glu	Thr	Gly	Arg	Asp	Ile
			20					25					30		
Arg	Ser	Leu	Ile	Gly	Asp	Ala	Ala	Phe	Leu	Lys	Arg	Leu	Asp	Pro	Lys
		35				40						45			
Lys	Tyr	Thr	Asp	Glu	Thr	Phe	Gly	Val	Pro	Thr	Ile	Thr	Asp	Ile	Leu
	50				55						60				
Gln	Glu	Leu	Glu	Lys	Pro	Gly	Arg	Asp	Pro	Arg	Pro	Glu	Phe	Lys	Thr
65				70					75					80	
Ala	Glu	Phe	Gln	Asp	Gly	Val	Glu	Asp	Leu	Lys	Asp	Leu	Gln	Pro	Gly
			85					90					95		
Met	Ile	Leu	Glu	Gly	Val	Val	Thr	Asn	Val	Thr	Asn	Phe	Gly	Ala	Phe
		100						105					110		
Val	Asp	Ile	Gly	Val	His	Gln	Asp	Gly	Leu	Val	His	Ile	Ser	Ala	Leu
		115					120					125			

Ser

<210> 2405

<211> 859

<212> DNA

<213> Homo sapiens

<400> 2405

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 120
 ctactccac atttcactac aaaccaagga aagctccctc atggaccgac atctggtgag
 180
 ctttcacttc tcccctggca atgcctggcc acctgacacc tggcctccct cctctttcca
 240
 gcaatcctgg taccaacgaa tggctcacca ccacccaccc caatgcccag accgcagacc
 300
 tgcattcctc ccattctaca gccccaaatc caaaccgcta ttcattctac ctcccatcct
 360

actcctcagc aatttcttcc accgtagact ctgggtaatt ggactgactg aagcccaggg
 420
 gtcagtttct gtcctaagag cgctccaggt ggctgcaccc tgtgcccaga gccaggcccc
 480
 ctgctatagg ctgctgcac tccccctgca ggtgctgggg acaccgcaac ctcctcctg
 540
 gggacaccta cttgcctttg caggccctcg ggggtcactt ctcccaggaa gccgcctctg
 600
 ggtgaggtaa tatccctcta tcacagcatt ggccacacca cattgcaaac gctgctgggg
 660
 tccactgtct tcaccaatta caccatgagc tccacagact ccaggaccat ggcttctacc
 720
 tctcagttcc cagtgctagc tatggggccc agcacacagg gaacagcagt tcaattaccc
 780
 agttcactga agggcagacc tgggatcata caggggagcaa ggaagcttga gccccctcag
 840
 gagaagggga agaacgcgt
 859

<210> 2406

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2406

Met	Asp	Arg	His	Leu	Val	Ser	Leu	His	Leu	Ser	Pro	Gly	Asn	Ala	Trp
1				5					10					15	
Pro	Pro	Asp	Thr	Trp	Pro	Pro	Ser	Ser	Phe	Gln	Gln	Ser	Trp	Tyr	Gln
			20				25						30		
Arg	Met	Ala	His	His	His	Pro	Pro	Gln	Cys	Pro	Asp	Arg	Arg	Pro	Ala
		35					40				45				
Phe	Leu	Pro	Ser	His	Ser	Pro	Lys	Ser	Lys	Pro	Leu	Phe	Ile	Leu	Pro
	50					55					60				
Pro	Ile	Leu	Leu	Leu	Thr	Asn	Phe	Phe	His	Arg	Arg	Leu	Trp	Leu	Ile
65					70					75				80	
Gly	Leu	Thr	Glu	Ala	Gln	Gly	Ser	Val	Ser	Val	Leu	Arg	Ala	Leu	Gln
			85				90						95		
Val	Ala	Ala	Pro	Cys	Ala	Gln	Ser	Gln	Ala	Pro	Cys	Tyr	Arg	Leu	Ala
			100					105					110		
Ala	Leu	Pro	Leu	Gln	Val	Leu	Gly	Thr	Pro	Gln	Pro	Ser	Ser	Trp	Gly
			115				120					125			
His	Leu	Leu	Ala	Phe	Ala	Gly	Pro	Arg	Gly	Ser	Leu	Leu	Pro	Gly	Ser
	130					135					140				
Arg	Leu	Trp	Val	Arg											
145															

<210> 2407

<211> 303

<212> DNA

<213> Homo sapiens

<400> 2407

nacgcgtggg ttatcttcag catggtgatc gcgattgggt tagccgttat ggctgcggtc
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gtattcatcg agcaaggcca gcgacgtatc ccggtgcagt acgccaagcg gatggtgggg
 120
 cgccgaatgt ttggtggctc gacgacgtac attccgctca aggtaaacca atctggcggt
 180
 atcccgggtca tctttgcctc gtcgatcctg taccttccgg tgctctacgc aactttccgg
 240
 ccgcagacgt ccgcggcaaa gtggatcggt cactacttca cgcgcggtga ccatccggtg
 300
 tac
 303

<210> 2408
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2408
 Xaa Ala Trp Phe Ile Phe Ser Met Val Ile Ala Ile Gly Leu Ala Val
 1 5 10 15
 Met Ala Ala Val Val Phe Ile Glu Gln Gly Gln Arg Arg Ile Pro Val
 20 25 30
 Gln Tyr Ala Lys Arg Met Val Gly Arg Arg Met Phe Gly Gly Ser Thr
 35 40 45
 Thr Tyr Ile Pro Leu Lys Val Asn Gln Ser Gly Val Ile Pro Val Ile
 50 55 60
 Phe Ala Ser Ser Ile Leu Tyr Leu Pro Val Leu Tyr Ala Thr Phe Arg
 65 70 75 80
 Pro Gln Thr Ser Ala Ala Lys Trp Ile Gly His Tyr Phe Thr Arg Gly
 85 90 95
 Asp His Pro Val Tyr
 100

<210> 2409
 <211> 322
 <212> DNA
 <213> Homo sapiens

<400> 2409
 ccatggtttc aagccccat tgtgtcagcc cagagagcaa ctggagaccc tctgacacca
 60
 cctcccggcc caacaggagg ggaagccgaa attcagattg tggaaactgc ctacaatttt
 120
 cttccggcca aatgaccctc cctaggctac caagaccctg gcctaagggg agccgaggtc
 180
 tcgccccgac tgcagacgcc cgcaccctga ctccagatgc ctccgaggca tccaggtggg
 240
 ccctgagggg cctgctgtgg ctttgttctt gttggctggg ctgggggtct gacctggtga
 300
 gggacatgag tgtcagtgtg gg
 322

<210> 2410
 <211> 106
 <212> PRT

<213> Homo sapiens

<400> 2410

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Met Val Ser Ser Pro His Cys Val Ser Pro Glu Ser Asn Trp Arg Pro
 1           5           10           15
Ser Asp Thr Thr Ser Arg Pro Asn Arg Arg Gly Ser Arg Asn Ser Asp
          20           25           30
Cys Gly Asn Cys Leu Gln Phe Ser Ser Gly Gln Met Thr Leu Pro Arg
          35           40           45
Leu Pro Arg Pro Trp Pro Lys Gly Ser Arg Gly Leu Gly Pro Thr Ala
          50           55           60
Asp Ala Arg Thr Leu Thr Pro Asp Ala Ser Glu Ala Ser Arg Trp Ala
65           70           75           80
Leu Arg Gly Leu Leu Trp Leu Cys Ser Cys Trp Leu Gly Trp Gly Ser
          85           90           95
Asp Leu Val Arg Asp Met Ser Val Ser Val
          100           105

```

<210> 2411

<211> 371

<212> DNA

<213> Homo sapiens

<400> 2411

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ccatgggctg ggtgctggag acacgagatc aggcaggccc tgcccctggg gctcattcta
60
gggtctgcgg cagacagggg gacagagggg gctgtgagag ccctgaggct gaggggcttt
120
ctggggaagc accatcccta gggacctccg cgttcgggtca gtggccgctg ctgtcgggtg
180
gcagagcaga ggctggggcg agagtgggtca gcaggcctgc tgggtggcagc ttgtgcagga
240
agggaggatg gaggttggct tgtggctggc aagaggggtgg catgcacgtc gctgaaaggc
300
aggcctgggc ccgaggcctg ggtgtgggga cgccctgagga gactgtacag tgtggagtcg
360
ggggggctgc g
371

```

<210> 2412

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2412

```

Met Gly Trp Val Leu Glu Thr Arg Asp Gln Ala Gly Pro Ala Pro Gly
 1           5           10           15
Ala His Ser Arg Val Cys Gly Arg Gln Gly Asp Arg Gly Ser Cys Glu
          20           25           30
Ser Pro Glu Ala Glu Trp Leu Ser Gly Glu Ala Pro Ser Leu Gly Thr
          35           40           45
Ser Ala Phe Gly Gln Trp Pro Leu Leu Ser Val Cys Arg Ala Glu Ala
          50           55           60
Gly Ala Arg Val Val Ser Arg Pro Ala Gly Gly Ser Leu Cys Arg Lys

```

```

<400> 2414
Met Lys Ser Val Thr Tyr Ser Gln Val Pro Arg Gly Arg Gly Glu Asn
 1          5          10          15
Pro Ala Cys Ser Asn Ser Ser Gln Asp Leu Ile His Arg Phe Arg Gly
 20          25          30
Thr Cys Gly Leu Trp Val His Ser Pro Gln Trp Gln Asn Leu Gln Ser

```



```

      35              40              45
His Ile Cys Trp Ala Glu Pro Ala Trp His Glu Gln Gly Phe Ser Leu
  50              55              60
Leu Trp Pro Pro Leu Phe Asn Thr Val Leu Leu Ser Lys Asn Trp Leu
  65              70              75              80
Gly Gly Ala Gly Pro Pro Cys Asn Leu Gln Ala Cys His Leu Val Val
      85              90              95
Ser Phe Cys Ser Ala Ala Ser Gln Gly Phe Ser Ala Pro Gly Ala Gly
      100              105              110
Trp Trp Gly Pro Ala Leu Leu Arg Leu Ile Arg Lys Asp Ala Leu His
      115              120              125
Gly Lys Ser Ser Pro Gln Pro Pro Val
      130              135

```

<210> 2415

<211> 2164

<212> DNA

<213> Homo sapiens

<400> 2415

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ctcgtgccag cgtcctcgcg ggtctgaatg gaagggtcga ggtcgtcgtc ggcggcgagc
  60
agatcctgaa gccagaactc caccgccgcg cccgcgccat gcggcgggag aggtgcggcg
  120
ccccccaccc gcgtcgccgc catggagggtg ctgcggcgct cttcgggtctt cgctgcggag
  180
atcatggacg cctttgatcg ctggcccaca gacaaggagc tgggtggcca ggctaaagca
  240
ctaggccggg agtacgtgca cgcgcggctt ttgcgcgcgc gcctctcctg gacgcgtcca
  300
gagcgtgcct cgctgcctcc tggaggacgc ctggctgagg tgtgcgcggt gctgctgcgc
  360
ctgggcgatg agctggagat gatccgcccc agcgtctacc gcaacgtggc gcgtcagctg
  420
cacatctccc tgcagtctga gcctgtggtg accgatgcgt tcctggccgt ggctggccac
  480
atcttctctg caggcatcac gtggggcaag gtggtgtccc tgtatgcggt ggccgcgggg
  540
ctggccgtgg actgtgtgag gcaggcccag cctgccatgg tccacgccct cgtggactgc
  600
ctgggggagt tcgtgcgcaa gaccctggca acctggctgc ggagacgcgg cggatggact
  660
gatgtctca agtgtgtggt cagcacagac cctggcctcc gctccactg gctggtggct
  720
gcactctgca gcttcggccg cttcctgaag gctgccttct tcgtgctgct gccagagaga
  780
tgagctgccc acctggcagt ggccgcagcc tggccctctg ggcccaacgc aggaggccct
  840
cagcaccga acacatcttc ctctcccca cccgagcctg gagcactcta acctcggaga
  900
ccccctaagc cccgttcctc cgcagacca ggccctccgg aagggtagt ggggaggggc
  960
tttctgagc ctggagctgg gctttggggc agcctgcgac cctccccgct tgtgtccctt
 1020

```

ctctgtgat ctctgtgttt tcccttttct ttctggggcc aggaagtcag ggtcaactcc
 1080
 caggcctcag gtgaaggggc ccagaacacc tgctctcacc tgagccccag gtgaaggggc
 1140
 ccgggaacac ctgctctcac ctgagcccca ggtgaagggg cccgggaaca cctgctctca
 1200
 cctgagcccc tgggaaggg gcccgggaaca cctgctctca cctgagcccc aggtgaaggg
 1260
 gcccgggaaca cctgctctca cctgagcccc aggtgaaggg gcccgggaaca cttgctctca
 1320
 cctgagcccc aggtgaaggg gcccgggaac acctctcacc tgaacccggg ggtcccatcc
 1380
 caggaagaag ggccatctca ggacatgagt cctcaggggc cctgcacatt caatctgaag
 1440
 gtgacctggt cctggctgaa gctggaagag ctgtggggac tcagcctgta aacagagcgt
 1500
 aaggttcaca tgctgggtgc ttaatccgtt tctggaggaa gagtatgaca cccacttggt
 1560
 atggggctct tgtgcggtgg ggaccggggc cggcgggctc caggccagca cacctaacc
 1620
 atggatgtgg aacctacggc cgagaaggaa tgttgcatga gtcggatccc agtccattgt
 1680
 cagtgagggg tgagggtgac cccatctgct atttttgtgc tcctcctcat acaaccattt
 1740
 ggggatgtgc ctattagggc tccgtaagaa ctcatatgcc tgggaagccc agcccctcag
 1800
 gtgccccac acacagcctt cccttgacgc ctacatttct aggcacatgt gaggcattct
 1860
 tcttgagcc ccgagccagc cctgtccctc cccagtgcag catggcactc aggagatata
 1920
 ggctggacat ggggcagtcg ttctggggag gcctggccta gcagccacc acctgagccc
 1980
 tcccggccag gcttcgtgct ggggtgggccc atgtgccagg acaggagggg cccggcgga
 2040
 agccagcccc ggactcatcg tgacattgag atcccactgg agggtagggg tggtaataaa
 2100
 cttctccaaa cgataaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 2160
 aaaa
 2164

<210> 2416

<211> 213

<212> PRT

<213> Homo sapiens

<400> 2416

Met	Glu	Val	Leu	Arg	Arg	Ser	Ser	Val	Phe	Ala	Ala	Glu	Ile	Met	Asp
1				5					10					15	
Ala	Phe	Asp	Arg	Trp	Pro	Thr	Asp	Lys	Glu	Leu	Val	Ala	Gln	Ala	Lys
			20					25					30		
Ala	Leu	Gly	Arg	Glu	Tyr	Val	His	Ala	Arg	Leu	Leu	Arg	Ala	Gly	Leu
		35					40					45			
Ser	Trp	Ser	Ala	Pro	Glu	Arg	Ala	Ser	Pro	Ala	Pro	Gly	Gly	Arg	Leu

```

      50              55              60
Ala Glu Val Cys Ala Val Leu Leu Arg Leu Gly Asp Glu Leu Glu Met
65              70              75              80
Ile Arg Pro Ser Val Tyr Arg Asn Val Ala Arg Gln Leu His Ile Ser
      85              90              95
Leu Gln Ser Glu Pro Val Val Thr Asp Ala Phe Leu Ala Val Ala Gly
      100              105              110
His Ile Phe Ser Ala Gly Ile Thr Trp Gly Lys Val Val Ser Leu Tyr
      115              120              125
Ala Val Ala Ala Gly Leu Ala Val Asp Cys Val Arg Gln Ala Gln Pro
      130              135              140
Ala Met Val His Ala Leu Val Asp Cys Leu Gly Glu Phe Val Arg Lys
145              150              155              160
Thr Leu Ala Thr Trp Leu Arg Arg Arg Gly Gly Trp Thr Asp Val Leu
      165              170              175
Lys Cys Val Val Ser Thr Asp Pro Gly Leu Arg Ser His Trp Leu Val
      180              185              190
Ala Ala Leu Cys Ser Phe Gly Arg Phe Leu Lys Ala Ala Phe Phe Val
      195              200              205
Leu Leu Pro Glu Arg
      210

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<210> 2417
 <211> 615
 <212> DNA
 <213> Homo sapiens

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<400> 2417
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120
cagttgtagt ttttcacact ttaaaaaagg ctttcaatta taaaatcttt ctccattatt
180
acgttttttc acaactgtga tccacgccac agttgcaa atcaacata gaaaaattaa
240
ataacataat tgatgaaaag ttagtttttc acaaaaatac gaaaaatttc atcacctaga
300
gaggaaaatg ttatgacaac ctatttcgat aaaattgaaa aaatctcctt tgaggggagaa
360
aatccacaaa atccttttgc tttcaaacat tatgatgcta atcaagtaat tttaggtaaa
420
actatggctg aacatttacg cttaacgggtg tggtattggc ataccttttg ctggaatggg
480
aatgatatgt ttgggctagg ttctttggaa cgaagttggc agaaaaattc aaatttgctt
540
gctggcgtag aacaaaaagc cgatattgct tttgagtttt tgaataagtt aggcgtgcct
600
tattattggt ttcatt
615

```

<210> 2418
 <211> 101
 <212> PRT

<213> Homo sapiens

<400> 2418

```

Met Thr Thr Tyr Phe Asp Lys Ile Glu Lys Ile Ser Phe Glu Gly Glu
 1           5           10           15
Lys Ser Thr Asn Pro Phe Ala Phe Lys His Tyr Asp Ala Asn Gln Val
          20           25           30
Ile Leu Gly Lys Thr Met Ala Glu His Leu Arg Leu Thr Val Cys Tyr
          35           40           45
Trp His Thr Phe Cys Trp Asn Gly Asn Asp Met Phe Gly Leu Gly Ser
          50           55           60
Leu Glu Arg Ser Trp Gln Lys Asn Ser Asn Leu Leu Ala Gly Ala Glu
65           70           75           80
Gln Lys Ala Asp Ile Ala Phe Glu Phe Leu Asn Lys Leu Gly Val Pro
          85           90           95
Tyr Tyr Cys Phe His
          100

```

<210> 2419

<211> 318

<212> DNA

<213> Homo sapiens

<400> 2419

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aaattttcag aagtcctggt gttgcgcggt caaacaggga ccgaggaggg acgaccgcct
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ccccgtgacg ctgcttcttc ttctgcctg cagctgaggg gtctgttttg tgcgcttcc
120
gtcccttctc cagctacaca gggggcagct tagcctctgg gatgggagtg gcttcataca
180
tgagacacat gcccgagtcg aggtagatgt cgctgtcgtc ctgcggcggg gtgggtgggg
240
tccagaacgg catgacttct gtctgcccac cgacatcttc gtagacatac tccatgttgt
300
aggcatcccc tcacgcgt
318

```

<210> 2420

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2420

```

Met Glu Tyr Val Tyr Glu Asp Val Asp Gly Gln Thr Glu Val Met Pro
 1           5           10           15
Phe Trp Thr Pro Pro Thr Pro Pro Gln Asp Asp Ser Asp Ile Tyr Leu
          20           25           30
Asp Ser Gly Met Cys Leu Met Tyr Glu Ala Thr Pro Ile Pro Glu Ala
          35           40           45
Lys Leu Pro Pro Val Tyr Val Arg Lys Glu Arg Lys Arg His Lys Thr
          50           55           60
Asp Pro Ser Ala Ala Gly Arg Lys Lys Lys Gln Arg His Gly Glu Ala
65           70           75           80
Val Val Pro Pro Arg Ser Leu Phe Asp Arg Ala Thr Pro Gly Leu Leu

```

1751

gaatgcgag actgcaagtc aaagggctct cgatgggcaa gtgtgaatct aggtatcttt
 180
 atatgcatga catgttctgg cattcataga agcctggggg tgcacatatc taaggtaaaga
 240
 tctgccaccc tggatacatg gctgccagag caagttgcat ttattcaatc aatgggaaac
 300
 gaaaaagcaa atagctattg ggaagcagag ctgcctccta actacgatag gggtggaata
 360
 gagaatttga t
 371

<210> 2424

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2424

Met	Asn	Glu	Lys	Ala	Ser	Val	Ser	Lys	Glu	Leu	Asn	Ala	Lys	His	Lys
1			5					10					15		
Lys	Ile	Leu	Glu	Gly	Leu	Leu	Arg	His	Pro	Glu	Asn	Arg	Glu	Cys	Ala
		20					25					30			
Asp	Cys	Lys	Ser	Lys	Gly	Pro	Arg	Trp	Ala	Ser	Val	Asn	Leu	Gly	Ile
		35				40					45				
Phe	Ile	Cys	Met	Thr	Cys	Ser	Gly	Ile	His	Arg	Ser	Leu	Gly	Val	His
	50				55				60						
Ile	Ser	Lys	Val	Arg	Ser	Ala	Thr	Leu	Asp	Thr	Trp	Leu	Pro	Glu	Gln
65				70				75				80			
Val	Ala	Phe	Ile	Gln	Ser	Met	Gly	Asn	Glu	Lys	Ala	Asn	Ser	Tyr	Trp
			85					90				95			
Glu	Ala	Glu	Leu	Pro	Pro	Asn	Tyr	Asp	Arg	Val	Gly	Ile	Glu	Asn	Leu
			100					105					110		

<210> 2425

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2425

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 cccgtcctga acggctacga gatgacccgc cgcctgcgcg aacatgaagc cnncgccatg
 120
 acctcccggc ctgcacgggg gttcggtttc accgcccacg cccagcccga ggaacgcccc
 180
 cgctgcaagg aagccggcat gaacgactgc ctgttcaagc ccatcagcct gaccaccctc
 240
 aaccagaaac tcgccgacgt caccgcgcgc ccgcgtccga gccaggccgc cttcagcctc
 300
 gacggcctgc acgccctgac cgggggagag ccgctgctga tgcgtcgctt gatcgacgag
 360
 ctgctgagca gttgccaggc ggcccgcgag gcaactgctc gactgcccac c
 411

<210> 2426

<211> 137
 <212> PRT
 <213> Homo sapiens

<400> 2426
 Thr Gly Leu Gln Ala Trp Lys Asp Gly His Phe Asp Leu Val Ile Val
 1 5 10 15
 Asp Cys Asn Met Pro Val Leu Asn Gly Tyr Glu Met Thr Arg Arg Leu
 20 25 30
 Arg Glu His Glu Ala Xaa Ala Met Thr Ser Arg Pro Ala Arg Gly Phe
 35 40 45
 Gly Phe Thr Ala His Ala Gln Pro Glu Glu Arg Pro Arg Cys Lys Glu
 50 55 60
 Ala Gly Met Asn Asp Cys Leu Phe Lys Pro Ile Ser Leu Thr Thr Leu
 65 70 75 80
 Asn Gln Lys Leu Ala Asp Val Thr Pro Arg Pro Arg Pro Ser Gln Ala
 85 90 95
 Ala Phe Ser Leu Asp Gly Leu His Ala Leu Thr Gly Gly Glu Pro Leu
 100 105 110
 Leu Met Arg Arg Leu Ile Asp Glu Leu Leu Ser Ser Cys Gln Ala Ala
 115 120 125
 Arg Glu Ala Leu Leu Gly Leu Pro Ile
 130 135

<210> 2427
 <211> 293
 <212> DNA
 <213> Homo sapiens

<400> 2427
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 120
 ggagcccaac aagaaagatg ttgtgtccct cctggtgagc gctgtcccag tgcacccgat
 180
 aatggcgaag aaaatgtgcc tctttcagga aaagtatagg aaatgagaga agactgtgac
 240
 aactcatgac ctgcatacctt aatatccagt gacttcatct ccccttcacg cgt
 293

<210> 2428
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 2428
 His Asn Lys Gly Leu Gly Ile Leu Val Pro Cys Ala Ile Xaa Ala Ala
 1 5 10 15
 Phe Leu Leu Ile Trp Ser Val Lys Cys Arg Ala Gln Leu Glu Ala
 20 25 30
 Arg Arg Ser Arg His Pro Ala Asp Gly Ala Gln Gln Glu Arg Cys Cys
 35 40 45
 Val Pro Pro Gly Glu Arg Cys Pro Ser Ala Pro Asp Asn Gly Glu Glu

<212> DNA

<213> Homo sapiens

<400> 2431

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120
aatggcgagg taacaatttc tggggcaaaa aatgccgcac taccaatcct atttgctact
180
ttattatctg aggggtgatat caatttaagc aatgtaccgc ttttaaaaga tattgccacc
240
actatcgagt tgtaaaaaga gctgggtgct actgctactc agactcaaca ctgctgcat
300
attaatgcga aagaagtaa gaactatact gcttcttatg aattagttag aagtatgcgt
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<210> 2432

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2432

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Thr Ile Ser Gly Ala Lys Asn Ala Ala Leu Pro Ile Leu Phe Ala Thr
20             25             30
Leu Leu Ser Glu Gly Asp Ile Asn Leu Ser Asn Val Pro Leu Leu Lys
35             40             45
Asp Ile Ala Thr Thr Ile Glu Leu Leu Lys Glu Leu Gly Ala Thr Ala
50             55             60
Thr Gln Thr Gln His Cys Val His Ile Asn Ala Lys Glu Val Lys Asn
65             70             75             80
Tyr Thr Ala Ser Tyr Glu Leu Val Arg Ser Met Arg Ala Ser Ile Leu
85             90             95
Ala Leu Gly Pro Leu Val Ala Arg Phe Gly Glu Ala
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<210> 2433

<211> 655

<212> DNA

<213> Homo sapiens

<400> 2433

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120
gctctatgat gctcacgtaa caatgaaatc acggaatctc tctctcagaa catttccccg
180
ttgtgaagca gcacgtgact ataatctttt cccaggttta ccctgaagt tcaagtgcaa
240

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tgccctgca cagcacagag caggggacga taggaggcgt gccttctcca gctgaaccac
 300
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 420
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 480
 tgtgactgcc gtgttccaaa cacacccttt gcttttacia aaacccaaac tgggagggtt
 540
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 655

<210> 2434

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2434

Met	Ala	His	Leu	Ile	Asn	Leu	Leu	Ser	His	Ser	Ala	Leu	Ser	Leu	Leu
1				5				10						15	
Cys	Ser	Glu	Thr	Val	Pro	Phe	Ala	Lys	Pro	Pro	Ser	Leu	Gly	Phe	Cys
		20						25					30		
Lys	Ser	Lys	Gly	Cys	Val	Trp	Asn	Thr	Ala	Val	Thr	Glu	Lys	Val	Leu
	35						40					45			
Phe	Ala	Gln	Ser	Ala	Arg	Pro	Leu	Leu	Leu	Ser	Leu	Met	Ser	Pro	Asp
	50				55						60				
Trp	Ala	Phe	Ile	Val	Pro	Cys	Thr	Glu	Ala	Ser	Leu	Ser	Pro	Arg	Ser
65					70				75					80	
Cys	Leu	Phe	Gly	Arg	Gly	Ser	Thr	Asn	Gly	Ser	Thr	Leu	Pro	Pro	Thr
			85					90					95		
Pro	Thr	Ala	Arg	Pro	Ala	Gly	Pro	Val	Val	Gln	Leu	Glu	Lys	Ala	Arg
		100					105					110			
Leu	Leu	Ser	Ser	Pro	Ala	Leu	Cys	Cys	Ala	Gly	Ala	Leu	His	Leu	Asn
	115					120						125			
Phe	Arg	Gly	Lys	Pro	Gly	Lys	Arg	Leu							
	130					135									

<210> 2435

<211> 401

<212> DNA

<213> Homo sapiens

<400> 2435

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 120
 gcagatattg accaagcggc ccagggtgctg atggcgccca agatgcgcaa tatcggcgag
 180
 gcctgcaccg cagctaaccg cttcttggtc cagcagctctg ttgctgagga gttctctgag
 240

aaactcgttg cggagtttga gaagctcaat ctgggcaatg gtatggacga aggtattacc
 300
 tgcggacctc tcgtcgagtc caaggctttg gagagcattg cggcattggg ggacgatgct
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 401

<210> 2436
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 2436
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 Xaa Ala Ala Asp Asn Val Leu Arg Thr Ser Met Glu Leu Gly Xaa Asn
 20 25 30
 Ala Pro Phe Ile Val Phe Glu Asp Ala Asp Ile Asp Gln Ala Val Gln
 35 40 45
 Gly Ala Met Gly Ala Lys Met Arg Asn Ile Gly Glu Ala Cys Thr Ala
 50 55 60
 Ala Asn Arg Phe Leu Val His Glu Ser Val Ala Glu Glu Phe Ser Glu
 65 70 75 80
 Lys Leu Val Ala Glu Phe Glu Lys Leu Asn Leu Gly Asn Gly Met Asp
 85 90 95
 Glu Gly Ile Thr Cys Gly Pro Leu Val Glu Ser Lys Ala Leu Glu Ser
 100 105 110
 Ile Ala Ala Leu Val Asp Asp Ala Ala Glu Lys Gly Ala Thr Ile Ser
 115 120 125
 Thr Gly Gly Lys Arg
 130

<210> 2437
 <211> 449
 <212> DNA
 <213> Homo sapiens

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 120
 atgggtatgta tttttcaagc tagacgttca taatggtaga acatgaggag gaaaactgcc
 180
 tcttaaatcc caccatttac tgtgacacag tgaccgggtc ctgcagcgga ctggatagtt
 240
 gtatcagagt cctggacgga aacagatggc actcaaaagg tggcgcgag ttcagagaaa
 300
 tgcctatgta cggatttggt ccaatgcctc agcctgacct cagggaacct cgggggtctg
 360
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 420
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 449

<210> 2438
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 2438
 Met Val Glu His Glu Glu Glu Asn Cys Leu Leu Asn Pro Thr Thr Tyr
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 Cys Asp Thr Val Thr Gly Pro Cys Ser Gly Leu Asp Ser Cys Ile Arg
 20 25 30
 Val Leu Asp Gly Asn Arg Trp His Ser Lys Gly Gly Ala Gln Phe Arg
 35 40 45
 Glu Met Pro Met Tyr Gly Phe Gly Pro Met Pro Gln Pro Asp Leu Arg
 50 55 60
 Asp Leu Arg Gly Ser Ala Pro Arg Pro Pro Leu His Ile Cys Asp Pro
 65 70 75 80
 Thr His Phe His Pro Ser Ala Thr Phe Lys Phe Gln Ser Phe His Phe
 85 90 95
 Ile Ala Val

<210> 2439
 <211> 4425
 <212> DNA
 <213> Homo sapiens

<400> 2439
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 180
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 240
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 360
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 420
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 480
 cagcggcgcc gggaaactgtg tacgcagctg cggcagtggc aactgaaggt gattgagaac
 540
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<210> 2440

<211> 1306

<212> PRT

<213> Homo sapiens

<400> 2440

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Thr	Asp	Asn	Ile	Lys	Lys	Thr	Leu	His	Lys	Phe	Cys	Gly	Pro	Ser	Pro
			20					25					30		
Val	Val	Phe	Ser	Asp	Val	Asn	Ser	Met	Tyr	Leu	Ser	Ser	Thr	Glu	Pro
		35					40					45			
Pro	Ala	Ala	Ala	Glu	Trp	Ala	Cys	Leu	Leu	Arg	Pro	Leu	Arg	Gly	Arg
	50					55				60					
Glu	Pro	Glu	Gly	Val	Trp	Asn	Leu	Leu	Ser	Ile	Val	Arg	Glu	Met	Phe
65					70				75					80	
Lys	Arg	Arg	Asp	Ser	Asn	Ala	Ala	Pro	Leu	Glu	Ile	Leu	Thr	Asp	
			85					90					95		
Gln	Cys	Leu	Thr	Tyr	Glu	Gln	Ile	Thr	Gly	Trp	Trp	Tyr	Ser	Val	Arg
		100					105						110		
Thr	Ser	Ala	Ser	His	Ser	Ser	Ala	Ser	Gly	His	Thr	Gly	Arg	Ser	Asn
		115					120					125			
Gly	Gln	Ser	Glu	Val	Ala	Ala	His	Ala	Cys	Ala	Ser	Met	Cys	Asp	Glu
	130					135				140					
Met	Val	Thr	Leu	Trp	Arg	Leu	Ala	Val	Leu	Asp	Pro	Ala	Leu	Ser	Pro
145					150				155					160	
Gln	Arg	Arg	Arg	Glu	Leu	Cys	Thr	Gln	Leu	Arg	Gln	Trp	Gln	Leu	Lys
			165					170						175	
Val	Ile	Glu	Asn	Val	Lys	Arg	Gly	Gln	His	Lys	Lys	Thr	Leu	Glu	Arg
		180					185						190		
Leu	Phe	Pro	Gly	Phe	Arg	Pro	Ala	Val	Glu	Ala	Cys	Tyr	Phe	Asn	Trp
	195						200					205			
Glu	Glu	Ala	Tyr	Pro	Leu	Pro	Gly	Val	Thr	Tyr	Ser	Gly	Thr	Asp	Arg
	210					215					220				
Lys	Leu	Ala	Leu	Cys	Trp	Ala	Arg	Ala	Leu	Pro	Ser	Arg	Pro	Gly	Ala
225					230				235					240	
Ser	Arg	Ser	Gly	Gly	Leu	Glu	Glu	Ser	Arg	Asp	Arg	Pro	Arg	Pro	Leu
			245					250					255		
Pro	Thr	Glu	Pro	Ala	Val	Arg	Pro	Lys	Glu	Pro	Gly	Thr	Lys	Arg	Lys

	260		265		270
Gly Leu Gly	Glu Gly Val Pro Ser Ser Gln Arg Gly	Pro Arg Arg Leu			
	275		280		285
Ser Ala Glu	Gly Gly Asp Lys Ala Leu His Lys Met Gly	Pro Gly Gly			
	290		295		300
Gly Lys Ala	Lys Ala Leu Gly Gly Ala Gly Ser Gly	Ser Lys Gly Ser			
305		310		315	320
Ala Gly Gly	Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp	Ser Ser Leu			
	325		330		335
Glu Pro Asp	Leu Ala Glu Met Ser Leu Asp Asp Ser Ser	Leu Ala Leu			
	340		345		350
Gly Ala Glu	Ala Ser Thr Phe Gly Gly Phe Pro Glu Ser	Pro Pro Pro			
	355		360		365
Cys Pro Leu	His Gly Gly Ser Arg Gly Pro Ser Thr Phe	Leu Pro Glu			
370		375		380	
Pro Pro Asp	Thr Tyr Glu Glu Asp Gly Gly Val Tyr Phe	Ser Glu Gly			
385		390		395	400
Pro Glu Pro	Pro Thr Ala Ser Val Gly Pro Pro Gly Leu	Leu Pro Gly			
	405		410		415
Asp Val Cys	Thr Gln Asp Asp Leu Pro Ser Thr Asp Glu	Ser Gly Asn			
	420		425		430
Gly Leu Pro	Lys Thr Lys Glu Ala Ala Pro Ala Val Gly	Glu Glu Asp			
	435		440		445
Asp Asp Tyr	Gln Ala Tyr Tyr Leu Asn Ala Gln Asp Gly	Ala Gly Gly			
450		455		460	
Glu Glu Glu	Lys Ala Glu Gly Gly Ala Gly Glu Glu His	Asp Leu Phe			
465		470		475	480
Ala Gly Leu	Lys Pro Leu Glu Gln Glu Ser Arg Met Glu	Val Leu Phe			
	485		490		495
Ala Cys Ala	Glu Ala Leu His Ala His Gly Tyr Ser Ser	Glu Ala Ser			
	500		505		510
Arg Leu Thr	Val Glu Leu Ala Gln Asp Leu Leu Ala Asn	Pro Pro Asp			
	515		520		525
Leu Lys Gly	Lys Lys Asn Lys Val Ser Thr Ser Arg Gln	Thr Trp Val			
	530		535		540
Ala Thr Asn	Thr Leu Ser Lys Ala Ala Phe Leu Leu Thr	Val Leu Ser			
545		550		555	560
Glu Arg Pro	Glu Arg His Asn Leu Ala Phe Arg Val Gly	Met Phe Ala			
	565		570		575
Leu Glu Leu	Gln Arg Pro Pro Ala Ser Thr Lys Ala Leu	Glu Val Lys			
	580		585		590
Leu Ala Tyr	Gln Glu Ser Glu Val Ala Ala Leu Leu Lys	Lys Ile Pro			
	595		600		605
Leu Gly Pro	Ser Glu Met Ser Thr Met Arg Cys Arg Ala	Glu Glu Leu			
	610		615		620
Arg Glu Gly	Thr Leu Cys Asp Tyr Arg Pro Val Leu Pro	Leu Met Leu			
625		630		635	640
Ala Ser Phe	Ile Phe Asp Val Leu Cys Ala Pro Val Val	Ser Pro Thr			
	645		650		655
Gly Ser Arg	Pro Pro Ser Arg Asn Trp Asn Ser Glu Thr	Pro Gly Asp			
	660		665		670
Glu Glu Leu	Gly Phe Glu Ala Ala Val Ala Ala Leu Gly	Met Lys Thr			
	675		680		685
Thr Val Ser	Glu Ala Glu His Pro Leu Leu Cys Glu Gly	Thr Arg Arg			

690		695		700
Glu Lys Gly Asp Leu Ala Leu Met Ile Thr Tyr Lys Asp Asp				
705		710		715
Gln Ala Lys Leu Lys Lys Ile Leu Asp Lys Leu Leu Asp Arg Glu Ser				
	725		730	735
Gln Thr His Lys Pro Gln Thr Leu Ser Ser Phe Tyr Ser Ser Ser Arg				
	740		745	750
Pro Thr Thr Ala Ser Gln Arg Ser Pro Ser Lys His Gly Gly Pro Ser				
	755		760	765
Ala Pro Gly Ala Leu Gln Pro Leu Thr Ser Gly Ser Ala Gly Pro Ala				
	770		775	780
Gln Pro Gly Ser Val Ala Gly Ala Gly Pro Gly Pro Thr Glu Gly Phe				
785		790		795
Thr Glu Lys Asn Val Pro Glu Ser Ser Pro His Ser Pro Cys Glu Gly				
	805		810	815
Leu Pro Ser Glu Ala Ala Leu Thr Pro Arg Pro Glu Gly Lys Val Pro				
	820		825	830
Ser Arg Leu Ala Leu Gly Ser Arg Gly Gly Tyr Asn Gly Arg Gly Trp				
	835		840	845
Gly Ser Ser Gly Arg Pro Lys Lys Lys His Thr Gly Met Ala Ser Ile				
	850		855	860
Asp Ser Ser Ala Pro Glu Thr Thr Ser Asp Ser Ser Pro Thr Leu Ser				
865		870		875
Arg Arg Pro Leu Arg Gly Gly Trp Ala Pro Thr Ser Trp Gly Arg Gly				
	885		890	895
Gln Asp Ser Asp Ser Ile Ser Ser Ser Ser Ser Asp Ser Leu Gly Ser				
	900		905	910
Ser Ser Ser Ser Gly Ser Arg Arg Ala Ser Ala Ser Gly Gly Ala Arg				
	915		920	925
Ala Lys Thr Val Glu Val Gly Arg Tyr Lys Gly Arg Arg Pro Glu Ser				
	930		935	940
His Ala Pro His Val Pro Asn Gln Pro Ser Glu Ala Ala Ala His Phe				
945		950		955
Tyr Phe Glu Leu Ala Lys Thr Val Leu Ile Lys Ala Gly Gly Asn Ser				
	965		970	975
Ser Thr Ser Ile Phe Thr His Pro Ser Ser Ser Gly Gly His Gln Gly				
	980		985	990
Pro His Arg Asn Leu His Leu Cys Ala Phe Glu Ile Gly Leu Tyr Ala				
	995		1000	1005
Leu Gly Leu His Asn Phe Val Ser Pro Asn Trp Leu Ser Arg Thr Tyr				
	1010		1015	1020
Ser Ser His Val Ser Trp Ile Thr Gly Gln Ala Met Glu Ile Gly Ser				
1025		1030		1035
Ala Ala Leu Thr Ile Leu Val Glu Cys Trp Asp Gly His Leu Thr Pro				
	1045		1050	1055
Pro Glu Val Ala Ser Leu Ala Asp Arg Ala Ser Arg Ala Arg Asp Ser				
	1060		1065	1070
Asn Met Val Arg Ala Ala Ala Glu Leu Ala Leu Ser Cys Leu Pro His				
	1075		1080	1085
Ala His Ala Leu Asn Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys				
	1090		1095	1100
Lys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu				
1105		1110		1115
Glu Ala Ala Lys Gly Gly Gly Val Tyr Pro Glu Val Leu Phe Glu Val				

	1125		1130		1135
Ala His Gln Trp Phe Trp Leu Tyr Glu Gln Thr Ala Gly Gly Ser Ser					
	1140		1145		1150
Thr Ala Arg Glu Gly Ala Thr Ser Cys Ser Ala Ser Gly Ile Arg Ala					
	1155		1160		1165
Gly Gly Glu Ala Gly Arg Gly Met Pro Glu Gly Arg Gly Gly Pro Gly					
	1170		1175		1180
Thr Glu Pro Val Thr Val Ala Ala Ala Val Thr Ala Ala Ala Thr					
1185		1190		1195	1200
Val Val Pro Val Ile Ser Val Gly Ser Ser Leu Tyr Pro Gly Pro Gly					
	1205		1210		1215
Leu Gly His Gly His Ser Pro Gly Leu His Pro Tyr Thr Ala Leu Gln					
	1220		1225		1230
Pro His Leu Pro Cys Ser Pro Gln Tyr Leu Thr His Pro Ala His Pro					
	1235		1240		1245
Ala His Pro Met Pro His Met Pro Arg Pro Ala Val Phe Pro Val Pro					
	1250		1255		1260
Ser Ser Ala Tyr Pro Gln Val Arg Pro Val Phe Cys Trp Gly Val Arg					
1265		1270		1275	1280
His Gly Lys Ile Leu Gly Ile His Arg Gly Leu Glu Trp Val Leu Trp					
	1285		1290		1295
Glu Tyr Asn Trp Ser Val Gly Glu Ser Trp					
	1300		1305		

<210> 2441

<211> 2244

<212> DNA

<213> Homo sapiens

<400> 2441

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 120
 ccatttggtta ttttgggttt ggtgaacatg cactttgcgt catgcaaatac aggtttctaa
 180
 acattaacaa ccggagagaa atgacatttt ggggcccgcg gtgactcttg cgtgcctctg
 240
 ctgccccctg gtggcagccc cgagtcactt ccagcagggc cccccaccc caagggccca
 300
 gcctcgggca ggaaggggtac aaagcccccg ccgtggttct gccacgaggt ctccctggaaa
 360
 tgaggggaac agcacagcga cgtccttgcg tcctaaatgc atccctggt ggccgttttt
 420
 cgccacacag gcttggcaaa atctctgcgt cactgagcag cattttaacc tcttgaatga
 480
 gatgcctccg accttttgga tcctctttct gcacctctca ggggacaggt cccgtctgta
 540
 cggcgctgcc tacgagaaac ccaagttcat tactgcagcc aaaggaaagg tgcaggcggt
 600
 gggaggtccc tgcaaggtga tgcgtctggc cataagtccc actgccttct cccacctgct
 660
 ggcctgtgcc cagcagttcc ggaagcagac ccaggcccag gtgtacagtg aggacatggc
 720

cctgaacata ggctcggaac cagaaggcct gcaggtggaa gagaaggagc gccctgtgca
780
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840
cagcctctcc aaggccagag tgcagacacc tgcgggtgtt gccgattcag ggaagtcgaa
900
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960
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1020
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1080
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1140
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1200
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1260
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1320
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1380
ccaggccag tgggagcagg ccctgggcag ctgcagcgtt ttcttcttct atggaatgga
1440
gagcttctg tcccatatat tagtggagag attggtcgcc atgaacttgc aagagtgcc
1500
ggtggcagtc ctgctggacc tggcacggtc ctaccagagc ttgaagaggc acatggagag
1560
cgtggagcac aggagatctg ttggccgttg ggaagccaat tggagaaacg gtgcgtctcc
1620
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1680
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1740
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1800
tggggcccca gcaattgcct ctgcccttg ctctgcccct ctgccaacce atccccacct
1860
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1920
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1980
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2040
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2100
ccagaagact attcagaccg tgagcctgtt tttgatttga gtgttccact aaacaaacaa
2160
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2220
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2244

<210> 2442

<211> 168

<212> PRT

<213> Homo sapiens

<400> 2442

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Met Gly Cys Arg Thr Lys Pro Ser Gly Ser Ala Gly Leu Asp Leu Pro
 1           5           10           15
Pro Ile Ser Cys Trp Gly Pro Ser Thr Cys Leu Cys Pro Trp Leu Cys
      20           25           30
Pro Ser Ala Asn Pro Ser Pro Pro Gly Ser His Pro Gln Leu Pro
      35           40           45
Ala Arg Ser Pro Leu Pro Gly Pro Leu Pro Ser Pro Trp Cys Ser Leu
      50           55           60
Ser Gln Gly Pro Ser Pro Ser Asp Phe Pro Gln Gly Ser Arg Leu Asp
65           70           75           80
Leu Glu Leu Cys Leu Pro Val Cys Ala Met Gly Ser Ala Ser Gly Leu
      85           90           95
Glu Leu Arg Leu Phe Pro Gly Pro Gly Gln Gly Arg Pro Pro Leu Gly
      100          105          110
Gly Ala Gly Ala Glu Leu Leu Arg Pro Glu Asp Tyr Ser Asp Arg Glu
      115          120          125
Pro Val Phe Asp Leu Ser Val Pro Leu Asn Lys Gln Gln Lys Pro Lys
      130          135          140
Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
145          150          155          160
Lys Lys Lys Lys Lys Lys Lys Lys
      165

```

<210> 2443

<211> 361

<212> DNA

<213> Homo sapiens

<400> 2443

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nccgtgcgcg ctatcttgcg tcgtacgccg tccagggag atgaaaaaat gctacaaacg
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gccgatggac gattgcgcat tgatatcgaa tccatgcgca cctttgtaga gggcaaagaa
120
gtccatttga cgaaaaacga atttttaatt gtgcagactt tgtttacgca cccaataag
180
atctatacgc gcgatgaaat tatcgaagtc accttcggaa tggattatga ggcctttgac
240
cgtgccattg ataccatata caaaaacatt cgccagaaga ttgaagcgga tccgaaaaac
300
cccgtctata tccgcacggt ttatggtgtc gggatatctgc ccggaggctt tgatgaagct
360
t
361

```

<210> 2444

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2444

Xaa Val Arg Ala Ile Leu Arg Arg Thr Pro Ser Arg Glu Asp Glu Lys
 1 5 10 15
 Met Leu Gln Thr Ala Asp Gly Arg Leu Arg Ile Asp Ile Glu Ser Met
 20 25 30
 Arg Thr Phe Val Glu Gly Lys Glu Val His Leu Thr Lys Asn Glu Phe
 35 40 45
 Leu Ile Val Gln Thr Leu Phe Thr His Pro Asn Lys Ile Tyr Thr Arg
 50 55 60
 Asp Glu Ile Ile Glu Val Thr Phe Gly Met Asp Tyr Glu Ala Phe Asp
 65 70 75 80
 Arg Ala Ile Asp Thr His Ile Lys Asn Ile Arg Gln Lys Ile Glu Ala
 85 90 95
 Asp Pro Lys Asn Pro Val Tyr Ile Arg Thr Val Tyr Gly Val Gly Tyr
 100 105 110
 Leu Pro Gly Gly Phe Asp Glu Ala
 115 120

<210> 2445

<211> 403

<212> DNA

<213> Homo sapiens

<400> 2445

agatctgttg aatgaagcag gtgccactta gacattcact tcactgactc caaccacaac
 60
 ctcccccttca tttgatatcc tgctcttggc agaaggatgg agaaagagca tcgcacaaag
 120
 aggaagcatg tttatcctgt tcagattact gcttctgccca ggctgctgct gctgttgggt
 180
 tctgcacatt tgctctttat taagcaaagt tcagagctgg gtgctggcaa gggaatcccc
 240
 tgtatttaca caggtaaacc tgagagccag agggcccca accatcctgg ctgagaggga
 300
 caagctatta gagttaataa cagtgcactg gcattccttc aaaatcctaa tggaagcata
 360
 aataaaaaga ggaaagtccc ctttacccaa gaacctgaaa aan
 403

<210> 2446

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2446

Met Glu Lys Glu His Arg Thr Lys Arg Lys His Val Tyr Pro Val Gln
 1 5 10 15
 Ile Thr Ala Ser Ala Arg Leu Leu Leu Leu Gly Ser Ala His Leu
 20 25 30
 Leu Phe Ile Lys Gln Met Ser Glu Leu Gly Ala Gly Lys Gly Ile Pro
 35 40 45
 Cys Ile Tyr Thr Gly Lys Pro Glu Ser Gln Arg Ala Pro Asn His Pro
 50 55 60
 Gly Cys Glu Gly Gln Ala Ile Arg Val Asn Asn Ser Ala Leu Ala Phe

```
<210> 2447
<211> 744
<212> DNA
<213> Homo sapiens
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<210> 2448
<211> 248
<212> PRT
<213> Homo sapiens
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1768

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65          70          75          80
Leu Leu Ser Asp Val Asp Ala Leu Tyr Thr Ala His Pro Asp Ser Pro
          85          90          95
Asp Ala Arg Arg Val Glu Val Val Glu Asp Ile Asp Ala Leu Asp Val
          100          105          110
Asp Thr His Lys Ala Gly Ser Gly Val Gly Thr Gly Gly Met Thr Thr
          115          120          125
Lys Leu Glu Ala Ala Arg Met Ala Thr Cys Ala Gly Val Pro Val Val
          130          135          140
Leu Ala Ala Ala Val Asp Ala Pro Asp Val Leu Ala Gly Ala Pro Val
          145          150          155          160
Gly Thr Tyr Phe Arg Pro Leu Ala Thr Arg Arg Pro Arg Arg Leu Leu
          165          170          175
Trp Leu Ala Asp Ala Ala Thr Pro Gln Gly Gln Ile Val Ile Asp Asp
          180          185          190
Gly Ala Val Glu Ala Leu Thr Gln Arg His Ser Ser Leu Leu Ala Val
          195          200          205
Gly Val Thr Arg Val His Gly Asp Phe Gln Ala Gly Asp Pro Val Thr
          210          215          220
Ile Leu Ala Ser Asp Gly Arg Val Val Gly Arg Gly Ile Ala Gln Phe
          225          230          235          240
Ser His Asp Glu Val Arg Val Met
          245

```

<210> 2449

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2449

```

gtgcactttg ttacagccct ggaacatgaa cacatgccgt catcaactcc ccaaaatctc
60
ctactgetct cccctcctcc ctgggccctg tcctatcccc agaggccaga caggccttcc
120
tcgcatgcaa gagtctccct cgcctgccc gacagtggcc tccatctacc tgccgtgtctt
180
gctggactcc agaacactcc agtcctttcc cccttggggg ttgggggggg ccccccttt
240
ttttcccccc ctttccctct tcattccaca ggaggccagc ctcaacatcc cncccc
296

```

<210> 2450

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2450

```

Met Asn Thr Cys Arg His Gln Leu Pro Lys Ile Ser Tyr Cys Ser Pro
1          5          10          15
Leu Leu Pro Gly Pro Cys Pro Ile Pro Arg Gly Gln Thr Gly Leu Pro
20          25          30
Arg Met Gln Glu Ser Pro Ser Pro Cys Arg Thr Val Ala Ser Ile Tyr
35          40          45
Leu Pro Val Leu Leu Asp Ser Arg Thr Leu Gln Ser Phe Pro Pro Trp

```

```

      50              55              60
Gly Leu Gly Gly Ala Pro Pro Phe Phe Pro Pro Leu Ser Leu Phe Ile
65              70              75              80
Pro Gln Glu Ala Ser Leu Asn Ile Pro Xaa
      85              90

```

<210> 2451
 <211> 589
 <212> DNA
 <213> Homo sapiens

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<400> 2451
naccgctgac tggattgctc aacgggtgag gaatcgagcg gttacgatgt cgggccgac
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tgcaacgatg atcttgtag cgatgtattg accggtgtgt gggccgatct tgtgggccag
120
gagaaggctg tgggggtcct gcgtcgtgcc gccgaatcgc agccggggcg ctgctcccat
180acgcatggct cattacgggt ccgcctggat caggctcggtc gaatgctgcg      240
aaggcctttg cagcggcgct acagtgcgtc gaccatggat gcgggcagtg caatgcctgt
300
cgaaccngcc tgtcaggcgc ccacctgac gtcaccctcg tgcgtactga ggcgtgtct
360
attggcgtcg attgaggtcg tgaaatgggt ttgttcgagc gggcgatgaa ttcgggtccc
420
cggggcgtcc ccagggttgt cgtcgtcgaa gatgccgacc gcatcactga acgcggagct
480
gacgccttgc ttaaagctat cgaggagcct gcgccgaaaa ccgtctggtt gctgtgtgcc
540
cctactccag aggacgtcat cgtcacgac aggtcgagat gtcggcgcc
589

```

<210> 2452
 <211> 121
 <212> PRT
 <213> Homo sapiens

```

<400> 2452
Leu Asp Cys Ser Thr Gly Glu Glu Ser Ser Gly Tyr Asp Val Gly Pro
1              5              10              15
Ile Cys Asn Asp Asp Leu Val Ser Asp Val Leu Thr Gly Val Trp Ala
20              25              30
Asp Leu Val Gly Gln Glu Lys Ala Val Gly Val Leu Arg Arg Ala Ala
35              40              45
Glu Ser Gln Pro Gly Arg Ser Ser His Ala Met Ser His Ala Trp Leu
50              55              60
Ile Thr Gly Pro Pro Gly Ser Gly Arg Ser Asn Ala Ala Lys Ala Phe
65              70              75              80
Ala Ala Ala Leu Gln Cys Val Asp His Gly Cys Gly Gln Cys Asn Ala
85              90              95
Cys Arg Thr Xaa Leu Ser Gly Ala His Pro Asp Val Thr Leu Val Arg
100              105              110
Thr Glu Ala Leu Ser Ile Gly Val Asp
115              120

```


<210> 2453
 <211> 695
 <212> DNA
 <213> Homo sapiens

<400> 2453
 nnacgcgtca gccatctgtg agtgtcacac ctatacacac atccccgggc acactcaggg
 60
 agattcacac attcctacga gcacacatgt gcctgcatga gttattcccc atgtgaacac
 120
 acaggttggc acacgcacat gcccctgggt atgtctcatgt ccattcatcc atcccagcct
 180
 gtgcacgtcc tctcactcct gtgttcacac ctatgcccaa atgaaccaag ggacacacat
 240
 gcacaccctt atgtggtgca cacacactcg tgcacacgga gccacaccag cacatgctca
 300
 gaggcatttg tgtgcgtggg catttgacgc atgactcaga acggagtatg ggggtggcgcg
 360
 gcgtggctgg ggagggtccca tcagcccgcc tctgaaaccc tcccaacctg cccatcctgg
 420
 ccaggcact gtgtctccgg cttgggcttc agccccggac ccaggacac cccggacaaa
 480
 gaggagctgc tctcgtctga agcctgctac gaatgcagga tcaatggcct ctcccctcgg
 540
 gaccggccac gacgcagtgc ccacaggac caccaggtga catgggtgct gcactaggca
 600
 ggggtggcca gggaatgggt gagggtggga aagaggctgt ggaccgcact tagtcatgtc
 660
 agccccccga agaaggagca ccaggctcca gatct
 695

<210> 2454
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 2454
 Met Ser Tyr Ser Pro Cys Glu His Thr Gly Trp His Thr His Met Pro
 1 5 10 15
 Leu Gly Met Leu Met Ser Ile His Pro Ser Gln Pro Val His Val Leu
 20 25 30
 Ser Leu Leu Cys Ser His Leu Cys Pro Asn Glu Pro Arg Asp Thr His
 35 40 45
 Ala His Pro Tyr Val Val His Thr His Ser Cys Thr Arg Ser His Thr
 50 55 60
 Ser Thr Cys Ser Glu Ala Phe Val Cys Val Gly Ile Cys Ser Met Thr
 65 70 75 80
 Gln Asn Gly Val Trp Gly Gly Ala Ala Trp Leu Gly Arg Ser His Gln
 85 90 95
 Pro Ala Ser Glu Thr Leu Pro Thr Cys Pro Ser Trp Pro Arg His Cys
 100 105 110
 Val Ser Gly Leu Gly Phe Ser Pro Gly Pro Gln Asp Thr Pro Asp Lys
 115 120 125
 Glu Glu Leu Leu Ser Ser Glu Ala Cys Tyr Glu Cys Arg Ile Asn Gly

```
<210> 2455
<211> 378
<212> DNA
<213> Homo sapiens
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```
<210> 2456
<211> 126
<212> PRT
<213> Homo sapiens
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```
<210> 2457
<211> 754
<212> DNA
<213> Homo sapiens
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<400> 2457

cctaggaatt taccaccatc aaagacttac attaaccagc tatccatgaa ctcacctgag
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 atgagcgaat gtgacatctt gcacactctg cgatgggtctt ctgggctccg gatcagctcc
 120
 tatgtcaact ggataaagga tcaccttata aaacagggaa tgaaggctga gcatgctagc
 180
 tcgcttctag aactggcatc caccactaag thtagctcag tgaaatatga tgttgaaata
 240
 gtagaggaat acttcgctcg acagatctca tccttctgta gtatcgactg tgccaccatc
 300
 ttgcagctgc atgaaattcc cagtctgcag tccatctaca cccttgatgc cgcgattcta
 360
 aaaggccag gtctttttgg gatgagcatt tttctaagat ggctgctgag actgacctc
 420
 ataagtcgtc tgagattacc aagaacctac ttccagccac gctgcaactc attgacacct
 480
 atgcatcggt caccagagcc tatttgctgc aaaactttaa tgaagaggga acaactgaga
 540
 aaccttccaa ggagaaactg caaggctttg ctgctgtttt ggctattggc tctagcaggt
 600
 gcaaggcaaa tactctgggt ccgacactgg ttcagaattt gccatcgta gtgcagactg
 660
 tgtgtgagtc ctggaacaac atcaatacca atgaatttcc caatattgga tcctggcgca
 720
 atgcctttgc caatgacacc atcccttcac gcgt
 754

<210> 2458

<211> 236

<212> PRT

<213> Homo sapiens

<400> 2458

Met Asn Ser Pro Glu Met Ser Glu Cys Asp Ile Leu His Thr Leu Arg
 1 5 10 15
 Trp Ser Ser Arg Leu Arg Ile Ser Ser Tyr Val Asn Trp Ile Lys Asp
 20 25 30
 His Leu Ile Lys Gln Gly Met Lys Ala Glu His Ala Ser Ser Leu Leu
 35 40 45
 Glu Leu Ala Ser Thr Thr Lys Cys Ser Ser Val Lys Tyr Asp Val Glu
 50 55 60
 Ile Val Glu Glu Tyr Phe Ala Arg Gln Ile Ser Ser Phe Cys Ser Ile
 65 70 75 80
 Asp Cys Ala Thr Ile Leu Gln Leu His Glu Ile Pro Ser Leu Gln Ser
 85 90 95
 Ile Tyr Thr Leu Asp Ala Ala Ile Leu Lys Gly Pro Gly Leu Phe Gly
 100 105 110
 Met Ser Ile Phe Leu Arg Trp Leu Arg Leu Ile Leu Ile Ser Arg
 115 120 125
 Leu Arg Leu Pro Arg Thr Tyr Phe Gln Pro Arg Cys Asn Ser Leu Thr
 130 135 140
 Pro Met His Arg Ser Pro Glu Pro Ile Cys Cys Lys Thr Leu Met Lys

145 150 155 160
 Arg Glu Gln Leu Arg Asn Leu Pro Arg Arg Asn Cys Lys Ala Leu Leu
 165 170 175
 Leu Phe Trp Leu Leu Ala Leu Ala Gly Ala Arg Gln Ile Leu Trp Val
 180 185 190
 Arg His Trp Phe Arg Ile Cys His Arg Gln Cys Arg Leu Cys Val Ser
 195 200 205
 Pro Gly Thr Thr Ser Ile Pro Met Asn Phe Pro Ile Leu Asp Pro Gly
 210 215 220
 Ala Met Pro Leu Pro Met Thr Pro Ser Leu His Ala
 225 230 235

<210> 2459
 <211> 382
 <212> DNA
 <213> Homo sapiens

<400> 2459
 accggtgcac agatcggtct ggccgcgtgc actgccccgc tcaagcaaat cgctatcaac
 60
 gctggtcttg agggcggcgt cgtggctgag aaggctcgctg gtctgccccgc aggacagggc
 120
 ctcaacgcgg ccaatgacga gtatgtcgac atggttagagg ccggcatcat tgaccgggcc
 180
 aaggtgaccc gtteggctct gcagaacgcc gcgtccatcg cggccctgtt cctcaccact
 240
 gaagccgtca tcgctgacaa gcccagacct gttaaggctc ccgctggcgg cggtgatatg
 300
 gacggtatgg gtggcatggg cggcatgatg tgatcgtgta ttgccttcgc tgatttgagt
 360
 gggatgccac tttgccccag gc
 382

<210> 2460
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 2460
 Thr Gly Ala Gln Ile Val Leu Ala Ala Cys Thr Ala Pro Leu Lys Gln
 1 5 10 15
 Ile Ala Ile Asn Ala Gly Leu Glu Gly Gly Val Val Ala Glu Lys Val
 20 25 30
 Ala Gly Leu Pro Ala Gly Gln Gly Leu Asn Ala Ala Asn Asp Glu Tyr
 35 40 45
 Val Asp Met Val Glu Ala Gly Ile Ile Asp Pro Ala Lys Val Thr Arg
 50 55 60
 Ser Ala Leu Gln Asn Ala Ala Ser Ile Ala Ala Leu Phe Leu Thr Thr
 65 70 75 80
 Glu Ala Val Ile Ala Asp Lys Pro Glu Pro Val Lys Ala Pro Ala Gly
 85 90 95
 Gly Gly Asp Met Asp Gly Met Gly Gly Met Gly Gly Met Met
 100 105 110

<210> 2461
 <211> 558
 <212> DNA
 <213> Homo sapiens

<400> 2461
 tccggacaaa agggttcaat cgaagtatgg ttagcctttt ccaagtcgcc aggacggacc
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 tgcaatgctg tttgtcgtca tgctcggggg caagcaccca cgggctaaaa tcgaaattca
 120
 cgatgtggta ttcgcagtcg cggatacgtt gcaacacacc tacaccaat tgcgcgacgg
 180
 ctggttcggc agccctaagg tgtgcatatc gatgcgtgga tggccgtcga tggcgtcgac
 240
 ggctggaaag tcgaactcag ccagatggcg ccgcctgccg acgcgcacat cctgtacttc
 300
 atcaacctcg gcggctacga ggccaacgct tttggcgagg cccatcatta cctgctgggtg
 360
 gtcgcccggg aaaaacagga agccaagcgc aaggggcagc ggcaaattgt gcaacactgg
 420
 tcccaggccc acaccgatgg cgtaatggat atcgacgact gcttgccgat tgatctgggtg
 480
 gacggtcgct atgttcacct ggtgcaaggc ccgcaccagc cgatcatcca gcacaacgac
 540
 tacatcatcc tgccgcga
 558

<210> 2462
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 2462
 Met Val Ser Leu Phe Gln Val Ala Arg Thr Asp Leu Gln Cys Cys Leu
 1 5 10 15
 Ser Ser Cys Ser Gly Ala Ser Thr His Gly Leu Lys Ser Lys Phe Thr
 20 25 30
 Met Trp Tyr Ser Gln Ser Arg Ile Arg Cys Asn Thr Pro Thr Pro Asn
 35 40 45
 Cys Ala Thr Ala Gly Ser Ala Ala Leu Arg Cys Ala Tyr Arg Cys Val
 50 55 60
 Asp Gly Arg Arg Trp Arg Arg Arg Leu Glu Ser Arg Thr Gln Pro Asp
 65 70 75 80
 Gly Ala Ala Cys Arg Arg Ala Ser Pro Val Leu His Gln Pro Arg Arg
 85 90 95
 Leu Arg Gly Gln Arg Phe Trp Arg Gly Pro Ser Leu Pro Ala Gly Gly
 100 105 110
 Arg Pro Gly Gln Thr Gly Ser Gln Ala Gln Gly Ala Ala Asn Val
 115 120 125
 Ala Thr Leu Val Pro Gly Pro His Arg Trp Arg Asn Gly Tyr Arg Arg
 130 135 140
 Leu Leu Ala Asp
 145

<210> 2463
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 2463
 cccagggggt aagccatgag cctgttgagc caagtggccc gggcgccgtt gagcgccaag
 60
 ttcggcctgc tgattattct gttatacgtc gcgctggcgc tgtgngcgcc gctgctggcg
 120
 ccctatggcg aaaccaggt ggtgggtgaa ggcttcgcgc cgtggagcgg ccagtttttg
 180
 ctgggcaccg ataacctggg gcgcgacatg ttcagccgcc tgatgtacgg cgcgcgcaat
 240
 accttgggca ttgccttcct gacgacgacg ctggcgtttc tgctcgggtg tttgagcggg
 300
 ttgggtcgcg cgatcaaggg cggttgggtc gac
 333

<210> 2464
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2464
 Met Ser Leu Leu Ser Gln Val Ala Arg Ala Pro Leu Ser Ala Lys Phe
 1 5 10 15
 Gly Leu Leu Ile Ile Leu Leu Tyr Val Ala Leu Ala Leu Xaa Ala Pro
 20 25 30
 Leu Leu Ala Pro Tyr Gly Glu Thr Gln Val Val Gly Glu Gly Phe Ala
 35 40 45
 Pro Trp Ser Gly Gln Phe Leu Leu Gly Thr Asp Asn Leu Gly Arg Asp
 50 55 60
 Met Phe Ser Arg Leu Met Tyr Gly Ala Arg Asn Thr Leu Gly Ile Ala
 65 70 75 80
 Phe Leu Thr Thr Thr Leu Ala Phe Leu Leu Gly Gly Leu Ser Gly Leu
 85 90 95
 Val Ala Ala Ile Lys Gly Gly Trp Val Asp
 100 105

<210> 2465
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 2465
 nntcatgagg acatttcctt catatttggt ggtggtaaat ccctoctggg acacggggaa
 60
 atgaccagag gctggcggcc cacctggcag gaacagatgc cagctctgct gcagccatcg
 120
 ccccttgagc ggggtgctct gtgcctcttt ctgcactgct ggtgggtggt gctgttggt
 180
 ggggtgatgga taccggctgc cagagatggc tcagggtgcca gctgctgggc tatctcaggc
 240

actggctgct gggctatctc gggtgccggc tgctgggcta tctcaggcgc tggctgctgc
 300
 tgggctgtct cgggtgctgg ctgttgggac gtctcctgtc ctggcactgg gctctcgggt
 360
 gctgggtgcc agctgctgcc taccttgac tgggctctgg gcactcactg cactcgggct
 420
 tttccatctc cgac
 434

<210> 2466

<211> 82

<212> PRT

<213> Homo sapiens

<400> 2466

Trp	Ile	Pro	Ala	Ala	Arg	Asp	Gly	Ser	Gly	Ala	Ser	Cys	Trp	Ala	Ile
1				5					10				15		
Ser	Gly	Thr	Gly	Cys	Trp	Ala	Ile	Ser	Gly	Ala	Gly	Cys	Trp	Ala	Ile
		20					25					30			
Ser	Gly	Ala	Gly	Cys	Cys	Trp	Ala	Val	Ser	Gly	Ala	Gly	Cys	Trp	Asp
		35				40					45				
Val	Ser	Cys	Pro	Gly	Thr	Gly	Leu	Ser	Gly	Ala	Gly	Cys	Gln	Leu	Leu
	50				55				60						
Pro	Thr	Leu	His	Trp	Ala	Leu	Gly	Thr	His	Cys	Thr	Arg	Ala	Phe	Pro
65				70				75						80	
Ser	Pro														

<210> 2467

<211> 306

<212> DNA

<213> Homo sapiens

<400> 2467

atggactcca ccggcaccgg agcaggggggt aaggggaaga agggagcggc cgggcgcaag
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 gtcggcgggc caaggaagaa gtcgggtgtcg aggtccgtga aggccgggtct ccagttcccc
 120
 gtcggccgca tcgggcgcta cttgaagaag ggccgctacg cgcagcgtgt cggcaccggc
 180
 gccccgtct acctcgccgc tgtctctgaa tacctcgccg ctgaggttct ggagctcgcc
 240
 ggtaatgctg ccagggacaa caagaagact cgcattattc cgcgccacgt gcttctggcg
 300
 atccgg
 306

<210> 2468

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2468

Met Asp Ser Thr Gly Thr Gly Ala Gly Gly Lys Gly Lys Lys Gly Ala

```

      1           5           10           15
Ala Gly Arg Lys Val Gly Gly Pro Arg Lys Lys Ser Val Ser Arg Ser
      20           25           30
Val Lys Ala Gly Leu Gln Phe Pro Val Gly Arg Ile Gly Arg Tyr Leu
      35           40           45
Lys Lys Gly Arg Tyr Ala Gln Arg Val Gly Thr Gly Ala Pro Val Tyr
      50           55           60
Leu Ala Ala Val Leu Glu Tyr Leu Ala Ala Glu Val Leu Glu Leu Ala
      65           70           75           80
Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro Arg His
      85           90           95
Val Leu Leu Ala Ile Arg
      100

```

<210> 2469

<211> 489

<212> DNA

<213> Homo sapiens

<400> 2469

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gccggcggtgg cacatggctt ccctgaagcc agcattgccc tggccaagga agctttgcag
60
aacagatgag atttcagctg ggacttgcag ccaagtggga tttggccttt tggggagaag
120
ggaaagggca ttcaaaggcc agggacagag tatggtcaaa ggcattggaga tgaggaagag
180
gggaccagag cagagggtca ggttggaag cgagttgggg tcaatctgca aaggggctga
240
cgtgccaggt aaaaaacagg agcacagttt agttttgtcg gatcatttca ggtggaaggg
300
cagtgggaat gttggagaaa acactttttg gtgtcgttac attgaatctg ctcactata
360
agaataaaac tttatttcat agagttattg tatggctcaa aataggtatg aagaattaag
420
aaaaagaatt ttagatttaa aatgaaaagg cacctacaaa agtagagtgg tagagttacc
480
aacgtggag
489

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<210> 2470

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2470

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Met Ala Ser Leu Lys Pro Ala Leu Pro Trp Pro Arg Lys Leu Cys Arg
      1           5           10           15
Thr Asp Glu Ile Ser Ala Gly Thr Cys Ser Gln Val Gly Phe Gly Leu
      20           25           30
Leu Gly Arg Arg Glu Arg Ala Phe Lys Gly Gln Gly Gln Ser Met Val
      35           40           45
Lys Gly Met Glu Met Arg Lys Arg Gly Pro Glu Gln Arg Val Arg Leu
      50           55           60
Glu Ser Glu Leu Gly Ser Ile Cys Lys Gly Ala Asp Val Pro Gly Lys

```



```

<400> 2472
Met Thr Phe Ser Phe Tyr Pro Thr Glu Leu Ser Leu Trp Ile Gln Ile
 1          5          10          15
Phe Gln Phe Phe Lys Gly Leu Tyr Val Met Gly Thr Leu Asp Phe Pro
 20          25          30
Val Asp Arg Ser Asn Val Leu Ser Val Ala Cys Met Val Ile Ala Gly
 35          40          45
Gly Glu Leu Lys Val Gly' Thr Leu Glu Asn Pro Leu Glu Lys Glu Gln

```

50		55		60	
Lys	Leu	Leu	Ile	Leu	Leu
65				70	
Met	Asn	Gly	Ile	His	Ile
				85	
Val	His	Leu	Tyr	Ser	Ala
				100	
Ala	Asp	Ile	Ala	Ser	Gly
				115	
Asp	Trp	Arg	Pro	His	Asp
				130	
Pro	His	Glu	Ala	Glu	Val
				145	
Val	Arg	Ile	Tyr	Glu	Arg
				165	
Val	Thr	Glu	Asp	Gly	
				180	

<210> 2473

<211> 698

<212> DNA

<213> Homo sapiens

<400> 2473

nngtgcacca agaaatggca gcctgacaag ctggtggtgg tatggactcg gcggaaccga
 60
 cgcactctgct ccaaggccca cagctggcag ccgnnggcat ccagaaccca taccggggca
 120
 ccgtggtgtg gatggtacnc tgagaatgtg gacatctctg tgaccctcta cagggacccc
 180
 cacgtggacc agtatgaggc caaagagtgg acatttatta ttgaaaatga gtctaagggg
 240
 cagcgggaagg tgctggccac ggccgaggtg gacctggccc gccatgccag ggcccgtgcc
 300
 ntgtccaagt ccnactgag gctgcggtg aagccaaagt cagtgaagac ggtgcaggct
 360
 gagctgagcc tcaactcttc cggggtgctg ctgcgggagg gccgtgccac ggacgatgac
 420
 atgcagagtc tcgcaagcct catgagtgtg aagcctagt atgtgggcaa cttggatgac
 480
 tttgctgaga gtgatgaaga tgaggctcat ggcccaggag ccccggaggc ccgggctcga
 540
 gtccccagc caggtgggct cacagcctgc tgtggatcga gactgccaag acctggggag
 600
 ggaggggttac ccgggcccacc agccacttgc tgtgcccgcc ctgtgatggg aactcattac
 660
 tgcccaggca gtcccaacca acccagcagc ctcaattg
 698

<210> 2474

<211> 232

<212> PRT

<213> Homo sapiens

<400> 2474

Xaa Cys Thr Lys Lys Trp Gln Pro Asp Lys Leu Val Val Val Trp Thr
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 Arg Arg Asn Arg Arg Ile Cys Ser Lys Ala His Ser Trp Gln Pro Xaa
 20 25 30
 Ala Ser Arg Thr His Thr Gly Ala Pro Trp Cys Gly Trp Tyr Xaa Glu
 35 40 45
 Asn Val Asp Ile Ser Val Thr Leu Tyr Arg Asp Pro His Val Asp Gln
 50 55 60
 Tyr Glu Ala Lys Glu Trp Thr Phe Ile Ile Glu Asn Glu Ser Lys Gly
 65 70 75 80
 Gln Arg Lys Val Leu Ala Thr Ala Glu Val Asp Leu Ala Arg His Ala
 85 90 95
 Arg Ala Arg Ala Xaa Ser Lys Ser Xaa Leu Arg Leu Arg Leu Lys Pro
 100 105 110
 Lys Ser Val Lys Thr Val Gln Ala Glu Leu Ser Leu Thr Leu Ser Gly
 115 120 125
 Val Leu Leu Arg Glu Gly Arg Ala Thr Asp Asp Asp Met Gln Ser Leu
 130 135 140
 Ala Ser Leu Met Ser Val Lys Pro Ser Asp Val Gly Asn Leu Asp Asp
 145 150 155 160
 Phe Ala Glu Ser Asp Glu Asp Glu Ala His Gly Pro Gly Ala Pro Glu
 165 170 175
 Ala Arg Ala Arg Val Pro Gln Pro Gly Gly Leu Thr Ala Cys Cys Gly
 180 185 190
 Ser Arg Leu Pro Arg Pro Gly Glu Gly Leu Pro Gly Pro Pro Ala
 195 200 205
 Thr Cys Cys Ala Arg Pro Val Met Gly Thr His Tyr Cys Pro Gly Ser
 210 215 220
 Pro Asn Gln Pro Ser Ser Leu Asn
 225 230

<210> 2475

<211> 1251

<212> DNA

<213> Homo sapiens

<400> 2475

ngcgcgcccc agatgcaggt gagcaagagg atgctggcgg ggggcgtgag gagcatgccc
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 agccccctcc tggcctgctg gcagcccatc ctctgctgg tgctgggctc agtgcgtgca
 120
 ggctcggcca cgggctgccc gccccgctgc gactgctccg cccaggaccg cgctgtgctg
 180
 tgccaccgca agcgctttgt ggcagtcctc gagggcatcc ccaccgagac gcgctgctg
 240
 gacctaggca agaaccgcat caaaacgctc aaccaggacg agttcgccag cttcccgcac
 300
 ctggaggagc tggagctcaa cgagaacatc gtgagcgccg tggagcccgg cgccttcaac
 360
 aacctcttca acctccggac gctgggtctc cgcagcaacc gcctgaagct catcccgcta
 420
 ggcgtcttca ctggcctcag caacctgacc aagctggaca tcagcgagaa caagatcggt
 480

atcctactgg actacatggt tcaggacctg tacaacctca agtcactgga ggttggcgac
 540
 aatgacctcg tctacatctc tcaccgcgcc ttcagcggcc tcaacagcct ggagcagctg
 600
 acgctggaga aatgcaacct gacctccatc cccaccgagg cgctgtccca cctgcacggc
 660
 ctcacgtgcc tgaggctccg gcacctcaac atcaatgccca tccgggacta ctccttcaag
 720
 aggtgtgacc gactcaaggt cttggagatc tccactggc cctacttgga caccatgaca
 780
 cccaactgcc tctacggcct caacctgacg tccctgtcca tcacacactg caatctgacc
 840
 gctgtgcctt acctggcctg ccgccaccta gtctatctcc gcttctctaa cctctctac
 900
 aaccccatca gcaccattga gggctccatg ttgcatgagc tgctccggct gcaggagatc
 960
 cagctggtgg gcgggcagct ggccgggtgg agccctgcct tccggggcct caactacctg
 1020
 cgcgtgctca atgtctctgg caaccagctg accacactgg aggaatcagt cttccactcg
 1080
 gtgggcaacc tggagacact catcctggac tccaaccgcg tggcctgcga ctgtcggctc
 1140
 ctgtgggtgt tccggcgccg tggcctacaa acttcaaccg gcagcagccc acgtgcgcc
 1200
 cgccccagtt tgtccagggg caaggagtgc aaggacttcc ctgatgtgct a
 1251

<210> 2476

<211> 417

<212> PRT

<213> Homo sapiens

<400> 2476

Xaa	Ala	Pro	Glu	Met	Gln	Val	Ser	Lys	Arg	Met	Leu	Ala	Gly	Gly	Val
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Arg	Ser	Met	Pro	Ser	Pro	Leu	Leu	Ala	Cys	Trp	Gln	Pro	Ile	Leu	Leu
			20					25					30		
Leu	Val	Leu	Gly	Ser	Val	Leu	Ser	Gly	Ser	Ala	Thr	Gly	Cys	Pro	Pro
			35				40					45			
Arg	Cys	Glu	Cys	Ser	Ala	Gln	Asp	Arg	Ala	Val	Leu	Cys	His	Arg	Lys
		50				55					60				
Arg	Phe	Val	Ala	Val	Pro	Glu	Gly	Ile	Pro	Thr	Glu	Thr	Arg	Leu	Leu
65					70				75					80	
Asp	Leu	Gly	Lys	Asn	Arg	Ile	Lys	Thr	Leu	Asn	Gln	Asp	Glu	Phe	Ala
			85					90					95		
Ser	Phe	Pro	His	Leu	Glu	Glu	Leu	Glu	Leu	Asn	Glu	Asn	Ile	Val	Ser
			100					105					110		
Ala	Val	Glu	Pro	Gly	Ala	Phe	Asn	Asn	Leu	Phe	Asn	Leu	Arg	Thr	Leu
			115				120					125			
Gly	Leu	Arg	Ser	Asn	Arg	Leu	Lys	Leu	Ile	Pro	Leu	Gly	Val	Phe	Thr
			130				135					140			
Gly	Leu	Ser	Asn	Leu	Thr	Lys	Leu	Asp	Ile	Ser	Glu	Asn	Lys	Ile	Val
145					150				155					160	
Ile	Leu	Leu	Asp	Tyr	Met	Phe	Gln	Asp	Leu	Tyr	Asn	Leu	Lys	Ser	Leu

														165			170			175		
Glu	Val	Gly	Asp	Asn	Asp	Leu	Val	Tyr	Ile	Ser	His	Arg	Ala	Phe	Ser							
														180			185			190		
Gly	Leu	Asn	Ser	Leu	Glu	Gln	Leu	Thr	Leu	Glu	Lys	Cys	Asn	Leu	Thr							
														195			200			205		
Ser	Ile	Pro	Thr	Glu	Ala	Leu	Ser	His	Leu	His	Gly	Leu	Ile	Val	Leu							
														210			215			220		
Arg	Leu	Arg	His	Leu	Asn	Ile	Asn	Ala	Ile	Arg	Asp	Tyr	Ser	Phe	Lys							
														225			230			235		
Arg	Leu	Tyr	Arg	Leu	Lys	Val	Leu	Glu	Ile	Ser	His	Trp	Pro	Tyr	Leu							
														245			250			255		
Asp	Thr	Met	Thr	Pro	Asn	Cys	Leu	Tyr	Gly	Leu	Asn	Leu	Thr	Ser	Leu							
														260			265			270		
Ser	Ile	Thr	His	Cys	Asn	Leu	Thr	Ala	Val	Pro	Tyr	Leu	Ala	Val	Arg							
														275			280			285		
His	Leu	Val	Tyr	Leu	Arg	Phe	Leu	Asn	Leu	Ser	Tyr	Asn	Pro	Ile	Ser							
														290			295			300		
Thr	Ile	Glu	Gly	Ser	Met	Leu	His	Glu	Leu	Leu	Arg	Leu	Gln	Glu	Ile							
														305			310			315		
Gln	Leu	Val	Gly	Gly	Gln	Leu	Ala	Gly	Trp	Ser	Pro	Ala	Phe	Arg	Gly							
														325			330			335		
Leu	Asn	Tyr	Leu	Arg	Val	Leu	Asn	Val	Ser	Gly	Asn	Gln	Leu	Thr	Thr							
														340			345			350		
Leu	Glu	Glu	Ser	Val	Phe	His	Ser	Val	Gly	Asn	Leu	Glu	Thr	Leu	Ile							
														355			360			365		
Leu	Asp	Ser	Asn	Pro	Leu	Ala	Cys	Asp	Cys	Arg	Leu	Leu	Trp	Val	Phe							
														370			375			380		
Arg	Arg	Arg	Gly	Leu	Gln	Thr	Ser	Thr	Gly	Ser	Pro	Arg	Ala	Pro								
														385			390			400		
Arg	Pro	Ser	Leu	Ser	Arg	Gly	Lys	Glu	Phe	Lys	Asp	Phe	Pro	Asp	Val							
														405			410			415		
Leu																						

<210> 2477

<211> 548

<212> DNA

<213> Homo sapiens

<400> 2477

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gtggccgggggctccctcca gctgtctctg gacggaggga cgggaagtgg ccagaagggg
120
aagtgtgagg agttcccgtc cagcctgtca tcagtctccc cagggtcttga agcggcggcc
180
ctgctcctgg ccgtgaccat ggaccctctg gagacccta tcaaggatgg catcctctac
240
cagcagcatg tcaagtttgg caagaagtgc tggcggaagg tgtgggctct gctgtatgca
300
ggaggcccat caggcgtggc acggctggag aactgggagg tccgggatgg tggcctggga
360
gcagcgggtg acaggtcggc ggggcctggc cggcgagggg agcgacgggt catccgcctg
420

gctgactgtg tgctcgtgct gccggctgac ggcgagagct gcccccgga caccggtgcc
 480
 ttctgtctca ccaccaccga gcgaagccat ctactggctg ctcagcaccg ccaggcctgg
 540
 atggggccc
 548

<210> 2478<211> 113

<212> PRT

<213> Homo sapiens

<400> 2478

Leu	Glu	Thr	Pro	Ile	Lys	Asp	Gly	Ile	Leu	Tyr	Gln	Gln	His	Val	Lys
1				5					10					15	
Phe	Gly	Lys	Lys	Cys	Trp	Arg	Lys	Val	Trp	Ala	Leu	Leu	Tyr	Ala	Gly
			20					25					30		
Gly	Pro	Ser	Gly	Val	Ala	Arg	Leu	Glu	Asn	Trp	Glu	Val	Arg	Asp	Gly
		35					40					45			
Gly	Leu	Gly	Ala	Ala	Gly	Asp	Arg	Ser	Ala	Gly	Pro	Gly	Arg	Arg	Gly
	50					55				60					
Glu	Arg	Arg	Val	Ile	Arg	Leu	Ala	Asp	Cys	Val	Ser	Val	Leu	Pro	Ala
65					70				75					80	
Asp	Gly	Glu	Ser	Cys	Pro	Arg	Asp	Thr	Gly	Ala	Phe	Leu	Leu	Thr	Thr
			85					90					95		
Thr	Glu	Arg	Ser	His	Leu	Leu	Ala	Ala	Gln	His	Arg	Gln	Ala	Trp	Met
			100				105						110		
Gly															

<210> 2479

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2479

gaattcatgg aggtctatga ggaggatgaa gaatatgcgt atgaaaaata tgaaacccat
 60
 ttccggcacga gctggatgga ggagaccgca ggcaccttct cactgaactg gtatcgcagc
 120
 aggtactgga atgacaatga agcagcagaa aggcttgcgt tgatgtgggc taaaaccttc
 180
 aaatatgcgt cgataaacgt ctcttggcag accgggatta gcaatagcga cgacgagggc
 240
 aatgaagatg aagacatggt ctacgccggt atctccattc cgctgggagg cggggcgtag
 300
 tctaactcct ggtatcgtga atat
 324

<210> 2480

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2480

Glu Phe Met Glu Val Tyr Glu Glu Asp Glu Glu Tyr Ala Tyr Glu Lys
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 Tyr Glu Thr His Phe Gly Thr Ser Trp Met Glu Glu Thr Ala Gly Thr
 20 25 30
 Phe Ser Leu Asn Trp Tyr Arg Ser Arg Tyr Trp Asn Asp Asn Glu Ala
 35 40 45
 Ala Glu Arg Leu Ala Leu Met Trp Ala Lys Thr Phe Lys Tyr Ala Ser
 50 55 60
 Ile Asn Val Ser Trp Gln Thr Gly Ile Ser Asn Ser Asp Asp Glu Gly
 65 70 75 80
 Asn Glu Asp Glu Asp Met Phe Tyr Ala Gly Ile Ser Ile Pro Leu Gly
 85 90 95
 Gly Gly Ala Tyr Ser Asn Ser Trp Tyr Arg Glu Tyr
 100 105

<210> 2481

<211> 484

<212> DNA

<213> Homo sapiens

<400> 2481

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 gttatgttgg cttactcagc tcgtaaccgt tctgcttcta tccgtatccc atacgttgca
 120
 agccctaaag gcaagcgtat tgaagctcgt ttccctgata caaccgctaa cccataccta
 180
 gcattttcag ctatgttgat ggctgggtatc gatgggtatca aaaacaagat tcaccctggc
 240
 gatgcagcag acaaagattt gtacgacctt ccagctgaag aagcagccgc tatccctcaa
 300
 gttgctagca gcttagaaga agcgtttaag tgccctagatc aagaccgtga gttcttgact
 360
 caaggtggcg ttttctctga cgacatgata gatgcttaca tcgctcttaa agcagaagaa
 420
 gcacagcgtg ttgcaatgac aacaacacca cttgagttcg aactttacta cagcctataa
 480
 gctt
 484

<210> 2482

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2482

Ala Phe Thr Asn Ala Ser Thr Asn Ser Tyr Lys Arg Leu Val Pro Gly
 1 5 10 15
 Phe Glu Ala Pro Val Met Leu Ala Tyr Ser Ala Arg Asn Arg Ser Ala
 20 25 30
 Ser Ile Arg Ile Pro Tyr Val Ala Ser Pro Lys Gly Lys Arg Ile Glu
 35 40 45
 Ala Arg Phe Pro Asp Pro Thr Ala Asn Pro Tyr Leu Ala Phe Ser Ala
 50 55 60

Met Leu Met Ala Gly Ile Asp Gly Ile Lys Asn Lys Ile His Pro Gly
 65 70 75 80
 Asp Ala Ala Asp Lys Asp Leu Tyr Asp Leu Pro Ala Glu Glu Ala Ala
 85 90 95
 Ala Ile Pro Gln Val Ala Ser Ser Leu Glu Glu Ala Leu Lys Cys Leu
 100 105 110
 Asp Gln Asp Arg Glu Phe Leu Thr Gln Gly Gly Val Phe Ser Asp Asp
 115 120 125
 Met Ile Asp Ala Tyr Ile Ala Leu Lys Ala Glu Glu Ala Gln Arg Val
 130 135 140
 Ala Met Thr Thr Thr Pro Leu Glu Phe Glu Leu Tyr Tyr Ser Leu
 145 150 155

<210> 2483

<211> 477

<212> DNA

<213> Homo sapiens

<400> 2483

acgcgtgtta gccaaatctt ggttcctccc gttctctcct taccgagcc tgaggccctt
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 ctggagaaca ggcagcctct gaggaacct ctgatccccg atcagccacc ccatcgcttg
 120
 cgtecccccgc cgttctctcc tggccttggt ccccttccc tgtgaaggag agaacagttt
 180
 cggtctggccc tgagatgctg gcaggcctgc agtcaggga gtgggcgcct cccacctga
 240
 aatggtcctt cgtggtgcag ttctgcttac ggggtagact ttgttgctt ccacagagga
 300
 cagttagggt gggcaggaag gaagtctctg ccacaagtct gcattccagg ctgtttccag
 360
 aagtgggaat tctctcgtgc cctggagtct gggaatgcat ttttagtttc ccagcttcag
 420
 gtagaattga aattgagtga gccaaaccac cacatccatc tggagccagg aactagt
 477

<210> 2484

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2484

Met His Ser Gln Thr Pro Gly His Glu Arg Ile Pro Thr Ser Gly Asn
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 Ser Leu Glu Cys Arg Leu Val Ala Glu Thr Ser Phe Leu Pro Thr Leu
 20 25 30
 Thr Val Leu Cys Gly Arg Gln Gln Ser Leu Pro Arg Lys Gln Asn Cys
 35 40 45
 Thr Thr Lys Asp His Phe Lys Val Gly Gly Ala His Cys Pro Asp Cys
 50 55 60
 Arg Pro Ala Ser Ile Ser Gly Pro Ala Glu Thr Val Leu Ser Phe Thr
 65 70 75 80
 Gly Lys Gly Glu Gln Gly Gln Glu Glu Ala Ala Gly Asp Ala Gly Asp
 85 90 95

Gly Val Ala Asp Arg Gly Ser Glu Val Ser Ser Glu Ala Ala Cys Ser
 100 105 110
 Pro Glu Gly Pro Gln Ala Arg Val Arg Glu Arg Glu Glu Pro Arg
 115 120 125
 Phe Gly
 130

<210> 2485
 <211> 608
 <212> DNA
 <213> Homo sapiens

<400> 2485
 accggtgagg cgaagtgcgg tggcaattac gcagcttcgc tgcgttccca gatcgatgcc
 60
 aagaccgcgc actgcaacga ggtgctcttt gtcgatgcag ttgaacatcg ctggatcgag
 120
 gagctgggtg gtatgaactt catggccatc agcaaagacg gtcagctcgt cacccccgag
 180
 ctgctgggca ccatactgcg tggcgtgacc cgcaagtcca ttctggaagt tgccccgac
 240
 ctcggtcttg aaccagtgga gcgcaagatc gatgttgacg agctccttga tggcgttcgc
 300
 tctggcgagt tcccggaagt cttcgctgtt ggtaccgccg cggttgtcac accgatcggc
 360
 tctttcctag atggagatac cgacgtgaag gtctctgagc ccaccggaaa gaccacgatg
 420
 gagatccgtc gccgtctgct ggatatccag ttcggacgcg ctgaggacac ccatggctgg
 480
 ttgaagcgag tctgctgacg gcgtcgacga ccattggggc cggccccaat gatgtgttca
 540
 cgatcgggct acgacggtgt cgatgacaat gtcttgccgc tggaagggtt gcccgacggt
 600
 gaacgcgt
 608

<210> 2486
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 2486
 Thr Gly Glu Ala Lys Cys Gly Gly Asn Tyr Ala Ala Ser Leu Arg Ser
 1 5 10 15
 Gln Ile Asp Ala Lys Thr Arg Asp Cys Asn Glu Val Leu Phe Val Asp
 20 25 30
 Ala Val Glu His Arg Trp Ile Glu Leu Gly Gly Met Asn Phe Met
 35 40 45
 Ala Ile Ser Lys Asp Gly Gln Leu Val Thr Pro Glu Leu Ala Gly Thr
 50 55 60
 Ile Leu Arg Gly Val Thr Arg Lys Ser Ile Leu Glu Val Ala Pro Asp
 65 70 75 80
 Leu Gly Leu Glu Pro Val Glu Arg Lys Ile Asp Val Asp Glu Leu Leu
 85 90 95

Asp Gly Val Arg Ser Gly Glu Phe Pro Glu Val Phe Ala Cys Gly Thr
 100 105 110
 Ala Ala Val Val Thr Pro Ile Gly Ser Phe Leu Asp Gly Asp Thr Asp
 115 120 125
 Val Lys Val Ser Glu Pro Thr Gly Lys Thr Thr Met Glu Ile Arg Arg
 130 135 140
 Arg Leu Leu Asp Ile Gln Phe Gly Arg Ala Glu Asp Thr His Gly Trp
 145 150 155 160
 Leu Lys Arg Val Cys
 165

<210> 2487

<211> 339

<212> DNA

<213> Homo sapiens

<400> 2487

nccccctcag gagagcagcc catggaaggt cccccccaag gggccccctga gagccctgac
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 agtctgcaaa gaaaccagaa agagctccag ggcctcctga cccaggtgca agccctggag
 120
 aaggaggccg caagcagtgt ggacgtgcag gccctgcgga ggctctttga ggccgtgccc
 180
 cagctgggag gggctgctcc tcaggctcct gctgcccacc aaaagcccga ggcctcagtg
 240
 gagcaggcct ttggggagct gacacgggtc agcacggaag ttgctcaact gaaggaacag
 300
 accttggtaa ggctgctgga cattgaagag gctgtgcac
 339

<210> 2488

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2488

Xaa Pro Ser Gly Glu Gln Pro Met Glu Gly Pro Pro Gln Gly Ala Pro
 1 5 10 15
 Glu Ser Pro Asp Ser Leu Gln Arg Asn Gln Lys Glu Leu Gln Gly Leu
 20 25 30
 Leu Thr Gln Val Gln Ala Leu Glu Lys Glu Ala Ala Ser Ser Val Asp
 35 40 45
 Val Gln Ala Leu Arg Arg Leu Phe Glu Ala Val Pro Gln Leu Gly Gly
 50 55 60
 Ala Ala Pro Gln Ala Pro Ala Ala His Gln Lys Pro Glu Ala Ser Val
 65 70 75 80
 Glu Gln Ala Phe Gly Glu Leu Thr Arg Val Ser Thr Glu Val Ala Gln
 85 90 95
 Leu Lys Glu Gln Thr Leu Val Arg Leu Leu Asp Ile Glu Glu Ala Val
 100 105 110
 His

<210> 2489

<211> 594
 <212> DNA
 <213> Homo sapiens

<400> 2489
 nacgcgttct tcggactggc gacgatgctg atttctatcc cgacgggggt gaagctattt
 60
 aactggctgg tcaccatcta tcacggccgg gtgcgtatca ccagccaggt tctttggacc
 120
 ctgggcttca tggtagacctt cgcgatcgga ggcattgacc gcgtactgct ggccatcccg
 180
 ggtgctgact tcgtactgca caacagcctg ttccgaattg ctcacttcca caacgtgatc
 240
 atcggcgggc cagtattcgg ctacatcgca ggtttcagct tctacttccc gaaagcgttc
 300
 ggcttcaagc tgcacgaaag ctggggcaag gctgcattct gggtctggat ctggggcttc
 360
 ttctgctcgt tcattgccgt ctatgcactg ggtttcatgg gcatgaccgg ttgtttgaac
 420
 gcccccccca cccctgagtg ggtcccgtag ctgtacgttg ccatggtcgg tgcactgatg
 480
 atcgtgtcgt gtatgcctg ccagttgatt cagctgtatg tcagcgtcgg tgatcgcaag
 540
 cagaacatgt gcgaatccgg cgacccatgg aatgcacaca ccctggaatg gtcg
 594

<210> 2490
 <211> 198
 <212> PRT
 <213> Homo sapiens

<400> 2490
 Xaa Ala Phe Phe Gly Leu Ala Thr Met Leu Ile Ser Ile Pro Thr Gly
 1 5 10 15
 Val Lys Leu Phe Asn Trp Leu Val Thr Ile Tyr His Gly Arg Val Arg
 20 25 30
 Ile Thr Ser Gln Val Leu Trp Thr Leu Gly Phe Met Val Thr Phe Ala
 35 40 45
 Ile Gly Gly Met Thr Gly Val Leu Leu Ala Ile Pro Gly Ala Asp Phe
 50 55 60
 Val Leu His Asn Ser Leu Phe Gly Ile Ala His Phe His Asn Val Ile
 65 70 75 80
 Ile Gly Gly Ala Val Phe Gly Tyr Ile Ala Gly Phe Ser Phe Tyr Phe
 85 90 95
 Pro Lys Ala Phe Gly Phe Lys Leu His Glu Ser Trp Gly Lys Ala Ala
 100 105 110
 Phe Trp Phe Trp Ile Ser Gly Phe Val Ala Phe Met Pro Leu Tyr
 115 120 125
 Ala Leu Gly Phe Met Gly Met Thr Arg Cys Leu Asn Ala Pro Pro Thr
 130 135 140
 Pro Glu Trp Val Pro Tyr Leu Tyr Val Ala Met Val Gly Ala Leu Met
 145 150 155 160
 Ile Ala Val Gly Ile Ala Cys Gln Leu Ile Gln Leu Tyr Val Ser Val
 165 170 175

Arg Asp Arg Lys Gln Asn Met Cys Glu Ser Gly Asp Pro Trp Asn Ala
 180 185 190
 His Thr Leu Glu Trp Ser
 195

<210> 2491
 <211> 592
 <212> DNA
 <213> Homo sapiens

<400> 2491
 acgcgtcacg caactgtcaa acttgccaat cgcgttgacg atactcgccc ctacctacgc
 60
 actacgttgt tgcttggctt attccatgca gtaacgacga atatgtcgcg atctcaggat
 120
 gatcttgacg tggctgaaag cggaactgta ttccgcgcgc tcaactccggc tgcggcaccg
 180
 cgtcccggtg tcgacgagcg cccctccgat gaagtccttg ccgagatcga cgccgccttg
 240
 ccagcccagc cgcgcgatgt cgcggccgtg atctgtggca gctggctgcc cgatcgctgg
 300
 gatggagagt cggtaaggc tgactggcga cacgctgtgc tggtcgcca gaaggctgct
 360
 gatgctcttg gcgtgaggct ggtgcgcaag gctgaccgtc aggtccatg gcatcccggc
 420
 cgttgtgcgg ctctcatcgt cgatgggaag gtcattggcc atgctggtga gttgcacccc
 480
 acagtagtgt cgaaggctgg tctgcctcag cgcacctgtg cggtcgagtt caatctagat
 540
 gctttgtag cctgcgctcc gagcgggtgt gaggtcatgg ttatttcaag gt
 592

<210> 2492
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 2492
 Thr Arg His Ala Thr Val Lys Leu Ala Asn Pro Leu Asp Asp Thr Arg
 1 5 10 15
 Pro Tyr Leu Arg Thr Thr Leu Leu Pro Gly Leu Phe His Ala Val Thr
 20 25 30
 Thr Asn Met Ser Arg Ser Gln Asp Asp Leu Ala Val Phe Glu Ser Gly
 35 40 45
 Thr Val Phe Arg Ala Val Thr Pro Ala Ala Ala Pro Arg Pro Gly Val
 50 55 60
 Asp Glu Arg Pro Ser Asp Glu Val Leu Ala Glu Ile Asp Ala Ala Leu
 65 70 75 80
 Pro Ala Gln Pro Arg Met Leu Ala Ala Val Ile Cys Gly Ser Trp Leu
 85 90 95
 Pro Asp Arg Trp Asp Gly Glu Ser Val Lys Ala Asp Trp Arg His Ala
 100 105 110
 Val Leu Val Ala Gln Lys Ala Ala Asp Ala Leu Gly Val Arg Leu Val
 115 120 125

Arg Lys Ala Asp Arg Gln Ala Pro Trp His Pro Gly Arg Cys Ala Ala
 130 135 140
 Leu Ile Val Asp Gly Lys Val Ile Gly His Ala Gly Glu Leu His Pro
 145 150 155 160
 Thr Val Val Ser Lys Ala Gly Leu Pro Gln Arg Thr Cys Ala Val Glu
 165 170 175
 Phe Asn Leu Asp Ala Leu Val Ala Cys Ala Pro Ser Gly Gly Glu Val
 180 185 190
 Met Val Ile Ser Arg
 195

<210> 2493

<211> 418

<212> DNA

<213> Homo sapiens

<400> 2493

acgcgtcagg ttgccggtga tcgtgccacc gtcacctcca tgggtgccttc aggagcagac
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 cccacacact atgagccgtc gctgcgtgac gttcggaccg tcgtgtattc gagagtcgcg
 120
 ctatcgaact acctcatgct cgaacctcat tcgggtcatca agaccatcga ctcttcacct
 180
 cctacgggat ctatcaatgt ctccctggct gaggaagccc aaaagtacgg cgcacaagt
 240
 atccccgtgg ttgaaaatgc caacctagac accgtgtggc tgggggttgcg cgtcattggc
 300
 aagggcgcca ggccggggagc cgaccgctct tcctcgggtc acctccagct gacgtcgggt
 360
 gaggggcctg gggacttcac tgcctatatc actgggacct ttggtcgacc tcagatct
 418

<210> 2494

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2494

Thr Arg Gln Val Ala Gly Asp Arg Ala Thr Val Thr Ser Met Val Pro
 1 5 10 15
 Ser Gly Ala Asp Pro His Thr Tyr Glu Pro Ser Leu Arg Asp Val Arg
 20 25 30
 Thr Val Val Tyr Ser Arg Val Ala Leu Ser Asn Tyr Leu Met Leu Glu
 35 40 45
 Pro His Ser Val Ile Lys Thr Ile Asp Ser Ser Leu Pro Thr Gly Ser
 50 55 60
 Ile Asn Val Ser Leu Ala Glu Glu Ala Gln Lys Tyr Gly Ala Gln Val
 65 70 75 80
 Ile Pro Leu Val Glu Asn Ala Asn Leu Asp Thr Val Trp Leu Gly Leu
 85 90 95
 Arg Val Ile Gly Lys Gly Ala Arg Arg Gly Ala Asp Arg Ser Ser Ser
 100 105 110
 Val Tyr Leu Gln Leu Thr Ser Val Glu Gly Pro Gly Asp Phe Thr Ala
 115 120 125

Tyr Ile Thr Gly Thr Phe Gly Arg Pro Gln Ile
130 135

<210> 2495

<211> 1478

<212> DNA

<213> Homo sapiens

<400> 2495

nnggcctggc ccagttgcac cagcagcgct gcggacactc ggggcggcag tcggtctgtc
60
agtcctcccg ccaggtcccg cggcccgcac ctgccgcccg cacctgcagc tccgcacctg
120
cggccagtgc ctactgccct ctcttgccgc ccgcacctgc agcccgcac ctgccgcttg
180
cacctgcagc cccgcgctct acccggttca agcatggctg accaggcgcc cttcgacacg
240
gacgtcaaca cctgacccg cttcgtcatg gaggagggca ggaaggcccg cggcacgggc
300
gagttgacct agctgctcaa ctcgctctgc acagcagtca aagccatctc ttcggcggtg
360
cgcaaggcgg gcatcgcgca cctctatggc attgctggtt ctaccaacgt gacaggtgat
420
caagttaaga agctggacgt cctctccaac gacctggta tgaacatgtt aaagtcatcc
480
tttgccacgt gtgttctcgt gtcagaagaa gataaacacg ccatcatagt ggaaccggag
540
aaaaggggta aatatgtggt ctgttttgat ccccttgatg gatcttccaa catcgattgc
600
cttgtgtccg ttggaacct ttttggcatc tatagaaaga aatcaactga tgagccttct
660
gagaaggatg ctctgcaacc aggccggaac ctggtggcag ccggctacgc actgtatggc
720
agtgccacca tgctggctct tgccatggac tgtggggca actgcttcat gctggacccg
780
gccatcgggg agttcatttt ggtggacaag gatgtgaaga taaaaaagaa aggtaaaatc
840
tacagcetta acgagggcta cgccaaggac tttgacctg ccgtcactga gtacatccag
900
aggaagaagt tccccccaga taattcagct ccttatgggg ccggtatgt gggctccatg
960
gtggctgatg ttcacgcac tctggtctac ggagggatat ttctgtaccc cgctaacaag
1020
aagagcccca atggaaagct gagactgctg tacgaatgca accccatggc ctacgtcatg
1080
gagaaggctg ggggaatggc caccactggg aaggaggccg tgtagacgt cattcccaca
1140
gacattcacc agaggcgcc ggtgatcttg gggcccccg acgacgtgct cgagttcctg
1200
aagggtgatg agaagcactc tgcccagtga gcacctgcc tgctgcac cggagaattg
1260
cctctacctg gaccttttgt ctcacacagc agtaccctga cctgctgtgc accttacatt
1320

cctagagagc agaaataaaa agcatgacta tttccacccat caaatgctgt agaattgcttg
 1380
 gcactcccta accaaatgct gtctccataa tgccactggg gttaagatat attttgagtg
 1440
 gatggaggag aaataaactt attcctcctt aaaaaaaaa
 1478

<210> 2496

<211> 338

<212> PRT

<213> Homo sapiens

<400> 2496

Met	Ala	Asp	Gln	Ala	Pro	Phe	Asp	Thr	Asp	Val	Asn	Thr	Leu	Thr	Arg
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Phe	Val	Met	Glu	Gly	Arg	Lys	Ala	Arg	Gly	Thr	Gly	Glu	Leu	Thr	
			20				25					30			
Gln	Leu	Leu	Asn	Ser	Leu	Cys	Thr	Ala	Val	Lys	Ala	Ile	Ser	Ser	Ala
			35				40					45			
Val	Arg	Lys	Ala	Gly	Ile	Ala	His	Leu	Tyr	Gly	Ile	Ala	Gly	Ser	Thr
			50				55				60				
Asn	Val	Thr	Gly	Asp	Gln	Val	Lys	Lys	Leu	Asp	Val	Leu	Ser	Asn	Asp
65					70					75				80	
Leu	Val	Met	Asn	Met	Leu	Lys	Ser	Ser	Phe	Ala	Thr	Cys	Val	Leu	Val
			85						90					95	
Ser	Glu	Glu	Asp	Lys	His	Ala	Ile	Ile	Val	Glu	Pro	Glu	Lys	Arg	Gly
			100					105					110		
Lys	Tyr	Val	Val	Cys	Phe	Asp	Pro	Leu	Asp	Gly	Ser	Ser	Asn	Ile	Asp
			115				120						125		
Cys	Leu	Val	Ser	Val	Gly	Thr	Ile	Phe	Gly	Ile	Tyr	Arg	Lys	Lys	Ser
			130				135					140			
Thr	Asp	Glu	Pro	Ser	Glu	Lys	Asp	Ala	Leu	Gln	Pro	Gly	Arg	Asn	Leu
145					150					155				160	
Val	Ala	Ala	Gly	Tyr	Ala	Leu	Tyr	Gly	Ser	Ala	Thr	Met	Leu	Val	Leu
			165						170					175	
Ala	Met	Asp	Cys	Gly	Val	Asn	Cys	Phe	Met	Leu	Asp	Pro	Ala	Ile	Gly
			180					185					190		
Glu	Phe	Ile	Leu	Val	Asp	Lys	Asp	Val	Lys	Ile	Lys	Lys	Lys	Gly	Lys
			195				200					205			
Ile	Tyr	Ser	Leu	Asn	Glu	Gly	Tyr	Ala	Lys	Asp	Phe	Asp	Pro	Ala	Val
			210				215					220			
Thr	Glu	Tyr	Ile	Gln	Arg	Lys	Lys	Phe	Pro	Pro	Asp	Asn	Ser	Ala	Pro
225					230					235				240	
Tyr	Gly	Ala	Arg	Tyr	Val	Gly	Ser	Met	Val	Ala	Asp	Val	His	Arg	Thr
			245						250					255	
Leu	Val	Tyr	Gly	Gly	Ile	Phe	Leu	Tyr	Pro	Ala	Asn	Lys	Lys	Ser	Pro
			260					265					270		
Asn	Gly	Lys	Leu	Arg	Leu	Leu	Tyr	Glu	Cys	Asn	Pro	Met	Ala	Tyr	Val
			275				280					285			
Met	Glu	Lys	Ala	Gly	Gly	Met	Ala	Thr	Thr	Gly	Lys	Glu	Ala	Val	Leu
295					300										290
Asp	Val	Ile	Pro	Thr	Asp	Ile	His	Gln	Arg	Ala	Pro	Val	Ile	Leu	Gly
					310					315				320	
Ser	Pro	Asp	Asp	Val	Leu	Glu	Phe	Leu	Lys	Val	Tyr	Glu	Lys	His	Ser

325 330 335

Ala Gln

<210> 2497
 <211> 399
 <212> DNA
 <213> Homo sapiens

<400> 2497
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 60
 cttggctacc tgccacagga tccccgcgac ccagacatgg aaatgatcgc gagggcaagg
 120
 atcctgtcag cgcggtggcct ggaccacata ctggaacgga tgcgcaccct ggagtatcag
 180
 atggcgaacg gttccgagga cgaccgtgcc gttgcgatgg acaaatacgc gaaggctgaa
 240
 gaccgtctcg tcgcgggccgg tggctatggc gcctctgcag aggcagcccg aatcgcgtcg
 300
 aacttggggc ttgacgaccg cgctcttcc cagccgttga aaaacctctc ggggtggtcag
 360
 cgtcgtcgcg tcgagctggc gcgcatactc ttttccgga
 399

<210> 2498
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 2498
 Thr Arg Val Leu Ala Gly Glu Thr Leu Pro Ala Ala Gly Ser Val Arg
 1 5 10 15
 Arg Thr Gly Glu Leu Gly Tyr Leu Pro Gln Asp Pro Arg Asp Pro Asp
 20 25 30
 Met Glu Met Ile Ala Arg Ala Arg Ile Leu Ser Ala Arg Gly Leu Asp
 35 40 45
 His Ile Leu Glu Arg Met Arg Thr Leu Glu Tyr Gln Met Ala Asn Gly
 50 55 60
 Ser Glu Asp Asp Arg Ala Val Ala Met Asp Lys Tyr Ala Lys Ala Glu
 65 70 75 80
 Asp Arg Leu Val Ala Ala Gly Gly Tyr Gly Ala Ser Ala Glu Ala Ala
 85 90 95
 Arg Ile Ala Ser Asn Leu Gly Leu Asp Asp Arg Val Leu Ser Gln Pro
 100 105 110
 Leu Lys Asn Leu Ser Gly Gly Gln Arg Arg Arg Val Glu Leu Ala Arg
 115 120 125
 Ile Leu Phe Ser Gly
 130

<210> 2499
 <211> 348
 <212> DNA
 <213> Homo sapiens

<400> 2499

nggccgggcg aagacccggtt ctatatggcc taccacgaca ccgagtgggg cgtgccggaa
 60
 tatgacgacc gcgcattgta cgagaagctc attctcgacg gattccaggc cggcctgtcg
 120
 tggatcacca tcctgcgcaa gcgcgacaac ttctgcaaag ccttcgacga tttccagccc
 180
 gagaagatag cgcgttacaa tgagaagaag gttcacgcgc tgatgaacga tgccggcatc
 240
 gtgcgcaacc gcgccaagat cgaaggcacg atcgccagcg cgaaggcgta tctcgacatc
 300
 atggaaaaag gcccgggctt ctccaggctg ctgtgggact tcgtcgac
 348

<210> 2500

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2500

Xaa	Pro	Gly	Glu	Asp	Pro	Phe	Tyr	Met	Ala	Tyr	His	Asp	Thr	Glu	Trp
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Gly	Val	Pro	Glu	Tyr	Asp	Asp	Arg	Ala	Leu	Tyr	Glu	Lys	Leu	Ile	Leu
			20				25						30		
Asp	Gly	Phe	Gln	Ala	Gly	Leu	Ser	Trp	Ile	Thr	Ile	Leu	Arg	Lys	Arg
		35				40					45				
Asp	Asn	Phe	Arg	Lys	Ala	Phe	Asp	Asp	Phe	Gln	Pro	Glu	Lys	Ile	Ala
	50				55				60						
Arg	Tyr	Asn	Glu	Lys	Lys	Val	His	Ala	Leu	Met	Asn	Asp	Ala	Gly	Ile
65					70				75					80	
Val	Arg	Asn	Arg	Ala	Lys	Ile	Glu	Gly	Thr	Ile	Ala	Ser	Ala	Lys	Ala
			85				90							95	
Tyr	Leu	Asp	Ile	Met	Glu	Lys	Gly	Pro	Gly	Phe	Ser	Arg	Leu	Leu	Trp
		100					105						110		
Asp	Phe	Val	Asp												
			115												

<210> 2501

<211> 569

<212> DNA

<213> Homo sapiens

<400> 2501

gaattcgatt catttgtggc aaatgcttac aatttgatga ttgtaaccac taaatcacac
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 taatgcccat taagccactc catacacttc tttaaataagg aaaatatatg taaagtacgt
 120
 acttagcaca gggcctgacc tatagtaatg gtcaagaatg atagcggggg tgaggatatg
 180
 ctttcaagag tcaaacaaatt ttactgggtgc atcatttcca tttattcttt ctcttttgca
 240
 taataaaacc actcttaaga ttctaccttg gttagttaga gacaacagtt ctctggaaag
 300

tagattctat agcttcaact ccctgaagag atgtgtgcta atttacaatca aaaaaatcct
 360
 taagggtata aaatatgccca agaactgtca acatcacaga ttaccactgg tagctttctgg
 420
 tatattgtta agtttccact taatttttaa gggacactag agaattagta tgactcacct
 480
 acactaagtt tatatactgt atttaacagt gtaattttca aatatgacag gaataaccca
 540
 gatgtgaaat gctgaatcat taatcacag
 569

<210> 2502

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2502

Met	Ile	Ala	Gly	Val	Arg	Tyr	Gly	Phe	Gln	Glu	Ser	Asn	Asn	Phe	Thr
1				5					10					15	
Gly	Ala	Ser	Phe	Pro	Phe	Ile	Leu	Ser	Leu	Leu	His	Asn	Lys	Thr	Thr
			20					25					30		
Leu	Lys	Ile	Leu	Pro	Trp	Leu	Val	Arg	Asp	Asn	Ser	Ser	Leu	Glu	Ser
			35				40					45			
Arg	Phe	Tyr	Ser	Phe	Asn	Ser	Leu	Lys	Arg	Cys	Val	Leu	Ile	Tyr	Ile
			50			55					60				
Lys	Lys	Ile	Leu	Lys	Gly	Ile	Lys	Tyr	Ala	Lys	Asn	Cys	Gln	His	His
65					70					75				80	
Arg	Leu	Pro	Leu	Val	Ala	Ser	Gly	Ile	Leu	Leu	Ser	Phe	His	Leu	Ile
				85					90					95	
Phe	Lys	Gly	His												
			100												

<210> 2503

<211> 419

<212> DNA

<213> Homo sapiens

<400> 2503

gccacgccag ccatctaccc ttctctcgac tcgccaaata agtattcact gaacatgtac
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 aaggccttgc tacctcagca gtccctacagc ttggcccagc cgctgtattc tccagtctgc
 120
 accaatgggg agcgctttct ctacctgccg ccacctcact acgtcgggtcc ccacatccca
 180
 tcgtccttgg catcaccat gaggtctctg acaccttcgg cctccccagc catcccgct
 240
 ctcgtccatt gcgcagacaa aagcctcccg tggaagatgg gcgtcagccc tgggaatcct
 300
 gttgattccc acgcctatcc tcacatccag aacagtaagc agcccagggt tccctctgcc
 360
 aaggcgggtca ccagtggcct gccgggggac acagctctcc tggtgcccc ctcacgcgt
 419

<210> 2504

<211> 121
 <212> PRT
 <213> Homo sapiens

<400> 2504
 Met Tyr Lys Ala Leu Leu Pro Gln Gln Ser Tyr Ser Leu Ala Gln Pro
 1 5 10 15
 Leu Tyr Ser Pro Val Cys Thr Asn Gly Glu Arg Phe Leu Tyr Leu Pro
 20 25 30
 Pro Pro His Tyr Val Gly Pro His Ile Pro Ser Ser Leu Ala Ser Pro
 35 40 45
 Met Arg Leu Ser Thr Pro Ser Ala Ser Pro Ala Ile Pro Pro Leu Val
 50 55 60
 His Cys Ala Asp Lys Ser Leu Pro Trp Lys Met Gly Val Ser Pro Gly
 65 70 75 80
 Asn Pro Val Asp Ser His Ala Tyr Pro His Ile Gln Asn Ser Lys Gln
 85 90 95
 Pro Arg Val Pro Ser Ala Lys Ala Val Thr Ser Gly Leu Pro Gly Asp
 100 105 110
 Thr Ala Leu Leu Leu Pro Pro Ser Arg
 115 120

<210> 2505
 <211> 540
 <212> DNA
 <213> Homo sapiens

<400> 2505
 tccggagcca atccgactca ggccctcgtc tggagccagg tgctgttgag catgggggtg
 60
 ccgctcgtgt tgggtccggt ggctcgggtc accggcgatc ggcgtctgat gggccaatgg
 120
 acgaatgggc gtgtcatggc cgccatcgcg tggatcgctg tggcagcagt ctcggctctc
 180
 aacgtgggtc tcgtcgtcga gacgggtcatg ggtgcatgat ccttgagggc agttttcttg
 240
 cgacaatcgt gaaaatgagt gacaaactca agcgggtgac gacgccgaac cccgcaccga
 300
 cctctgccca cgagctagcc aacgatttgg ccaactgcatt tcgcgggtac cctgctggag
 360
 tggcgatcct cacgacgatg ggagcggctg ggcccagagg cttgacggtc tcctccctgg
 420
 cgctcgggtg agtcgtcccg gctgttgtgt cgggtgctgt gggtaatggt tcgacgaccc
 480
 tggccaccct gacggaggag tcccgcgtca tcgtccacat gcttgatgca gatcgcgcg
 540

<210> 2506
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 2506
 Ser Gly Ala Asn Pro Thr Gln Ala Leu Val Trp Ser Gln Val Leu Leu

1		5		10		15									
Ser	Met	Gly	Leu	Pro	Leu	Val	Leu	Val	Pro	Leu	Ala	Arg	Phe	Thr	Gly
		20					25						30		
Asp	Arg	Arg	Leu	Met	Gly	Gln	Trp	Thr	Asn	Gly	Arg	Val	Met	Ala	Ala
		35				40						45			
Ile	Ala	Trp	Ile	Val	Val	Ala	Ala	Val	Ser	Ala	Leu	Asn	Val	Val	Leu
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Val	Val	Glu	Thr	Val	Met	Gly	Ala								
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<210> 2507

<211> 922

<212> DNA

<213> Homo sapiens

<400> 2507

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 acggagcagt gccccctgtt ttcacagcac aagtgcgcgc agcaccggcc gttcacctgc
 180
 ttccactggc acttccctcaa ccagcggcgc cgcaggcccc tccgcaggcg cgacggcacc
 240
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 300
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 360
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 420
 aagaatgggc tgcactgtgc cttcgcgcac gggcccatg acctccgctc ccctgtctac
 480
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 600
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 660
 aagaagcccc cgcggctgtg ccgccaaggc tatgcctgtc cctactacca caacagcaag
 720
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 780
 cacggggatg agtggggaga ccctggcaag tgtgagaacg gagacgcctg ccagtactgc
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 900
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<210> 2508

<211> 278

<212> PRT

<213> Homo sapiens

<400> 2508
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 20 25 30
 His Trp His Phe Leu Asn Gln Arg Arg Arg Arg Pro Leu Arg Arg Arg
 35 40 45
 Asp Gly Thr Phe Asn Tyr Ser Pro Asp Val Tyr Cys Ser Lys Tyr Asn
 50 55 60
 Glu Ala Thr Gly Val Cys Pro Asp Gly Asp Glu Cys Pro Tyr Leu His
 65 70 75 80
 Arg Thr Thr Gly Asp Thr Glu Arg Lys Tyr His Leu Arg Tyr Tyr Lys
 85 90 95
 Thr Gly Thr Cys Ile His Glu Thr Asp Ala Arg Gly His Cys Val Lys
 100 105 110
 Asn Gly Leu His Cys Ala Phe Ala His Gly Pro His Asp Leu Arg Ser
 115 120 125
 Pro Val Tyr Asp Ile Arg Glu Leu Gln Ala Met Glu Ala Leu Gln Asn
 130 135 140
 Gly Gln Thr Thr Val Glu Gly Ser Ile Glu Gly Gln Ser Ala Gly Ala
 145 150 155 160
 Ala Ser His Ala Met Ile Glu Lys Ile Leu Ser Glu Glu Pro Arg Trp
 165 170 175
 Gln Glu Thr Ala Tyr Val Leu Gly Asn Tyr Lys Thr Glu Pro Cys Lys
 180 185 190
 Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro Tyr Tyr His
 195 200 205
 Asn Ser Lys Asp Arg Arg Arg Ser Pro Arg Lys His Lys Tyr Arg Ser
 210 215 220
 Ser Pro Cys Pro Asn Val Lys His Gly Asp Glu Trp Gly Asp Pro Gly
 225 230 235 240
 Lys Cys Glu Asn Gly Asp Ala Cys Gln Tyr Cys His Thr Arg Thr Glu
 245 250 255
 Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys Cys Asn Gly Arg
 260 265 270
 Gly Gly Gly Val Arg Glu
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<210> 2509

<211> 348

<212> DNA

<213> Homo sapiens

<400> 2509

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 120
 gttcatgaac gggtaggagcc cggcaaaacc gaaactcaac caatccttgg ggatgctgga
 180
 cggcaggttg ccgagggcaa acacgttgac cacgttcgca ccgacaccac cgaccacggc
 240
 caccgctccc agcgaatct cgtagactta gcgccagggt tggtaaggcg tgtagcggtc
 300

gtaacgacgg gtgacctga actcggggct tcaaagtctt ctgctgtg
348

<210> 2510

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2510

Met	Ala	Pro	Arg	Gln	Gly	Pro	Ile	Leu	Arg	Ala	Leu	Val	Ala	Leu	Asp
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Phe	Val	Asp	Ala	Arg	Glu	Val	Leu	Leu	Pro	Ala	Thr	Ile	Gly	Leu	Asp
		20						25					30		
Val	His	Glu	Arg	Val	Glu	Pro	Gly	Lys	Thr	Glu	Thr	Gln	Pro	Ile	Leu
		35					40					45			
Gly	Asp	Ala	Gly	Arg	Gln	Val	Ala	Glu	Gly	Lys	His	Val	Asp	His	Val
	50				55						60				
Arg	Thr	Asp	Thr	Thr	Asp	His	Gly	His	Arg	Ser	Gln	Arg	Asn	Leu	Val
65					70				75				80		
Asp	Leu	Ala	Pro	Gly	Leu	Val	Arg	Arg	Val	Ala	Val	Val	Thr	Thr	Gly
			85					90					95		
Asp	Leu	Glu	Leu	Gly	Ala	Ser	Lys	Ser	Ser	Ala	Val				
			100					105							

<210> 2511

<211> 663

<212> DNA

<213> Homo sapiens

<400> 2511

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180
gcattacgcc caggacgcgt tgctggcctg gcggagatcg tcgtcaacgg tcaacctttt
240
accgtcactg acgccactga ggatgaacta gctctcactg cttgggctcg taccctctc
300
gaggggaactc ccacgcgat ggatggatcg tggcagctgc atcgccgctg agcgggccct
360
gagccagttc ggctcgctaa gcgcttcggt ggtgagcaat cgaacacctc gatcatgggt
420
ggcgacgcca tcatcatcaa aatgttccgc cgcctggagc ccggcgacaa ccttgacatc
480
accgtgcata gcgccctcaa cgatgcgggg atctcatcgg tggccacatt gtacggcttt
540
atgtccggac agatccccgc tgaggaacac atcccggtcg atctagctat gatcattgag
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aggttgccac agccccggga tggctgggaa ctcactcact ccaaggcagt cgatctcgtc
660
gac
663

<210> 2512
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 2512
 Xaa Arg Val Trp Asp His Ile Arg Gly Ala Arg Trp Phe Ser Gly Lys
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 Gly Arg Gly Gly Ser Leu Thr Arg Leu Leu Ser Leu Ala Pro Val Val
 20 25 30
 Asn Glu Gln Asp Leu Gln Val Leu Pro Val Ile Ala His Val Gly Tyr
 35 40 45
 Pro Gln Ala Ala Asp Glu Tyr Tyr Gln Leu Leu Leu Ala Leu Arg Pro
 50 55 60
 Gly Arg Val Ala Gly Leu Ala Glu Ile Val Val Asn Gly Gln Pro Phe
 65 70 75 80
 Thr Val Thr Asp Ala Thr Glu Asp Glu Leu Ala Leu Thr Ala Trp Ala
 85 90 95
 Arg Ile Leu Leu Glu Gly Thr Pro Ile Ala Met Asp Gly Ser Trp Gln
 100 105 110
 Leu His Arg Arg Arg Ala Ala Pro Glu Pro Val Arg Phe Ala Lys Arg
 115 120 125
 Phe Gly Gly Glu Gln Ser Asn Thr Ser Ile Met Val Gly Asp Ala Ile
 130 135 140
 Ile Ile Lys Met Phe Arg Arg Leu Glu Pro Gly Asp Asn Leu Asp Ile
 145 150 155 160
 Thr Val His Ser Ala Leu Asn Asp Ala Gly Ile Ser Ser Val Ala Thr
 165 170 175
 Leu Tyr Gly Phe Met Ser Gly Gln Ile Pro Ala Glu Glu His Ile Pro
 180 185 190
 Val Asp Leu Ala Met Ile Ile Glu Arg Leu Pro Gln Pro Arg Asp Gly
 195 200 205
 Trp Glu Leu Ile Thr Ala Lys Ala Val Asp Leu Val Asp
 210 215 220

<210> 2513
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 2513
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 cagcttgacc tggccaagaa ccgcctctat caggccattc agagagctga tgacatcttg
 120
 gacctgaagt tctgcatgga tggagttcag actgctttga ggagtgaaga ttatgagcag
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 240
 cagggcaaag agggctcagca tccgaaactg gagcatgatt gatgccaaacc tgaaattgct
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 360

ggaagggtg
368

<210> 2514
<211> 93
<212> PRT
<213> Homo sapiens

<400> 2514
Leu Ala Gly Met Ile Thr Phe Thr Cys Asn Leu Ala Glu Asn Val Ser
1 5 10 15
Ser Lys Val Arg Gln Leu Asp Leu Ala Lys Asn Arg Leu Tyr Gln Ala
20 25 30
Ile Gln Arg Ala Asp Asp Ile Leu Asp Leu Lys Phe Cys Met Asp Gly
35 40 45
Val Gln Thr Ala Leu Arg Ser Glu Asp Tyr Glu Gln Ala Ala Ala His
50 55 60
Ile His Arg Tyr Leu Cys Leu Asp Lys Ser Val Ile Glu Leu Ser Arg
65 70 75 80
Gln Gly Lys Glu Gly Gln His Pro Lys Leu Glu His Asp
85 90

<210> 2515
<211> 351
<212> DNA
<213> Homo sapiens

<400> 2515
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120
tatcagtcca tccctaaaag ccaaccaggc tctcccgagg gaggcaggaa atccctgctc
180
cctccatccc ccaccgggaa tgctgcaggg ggcttgaggg aggcgacaca gtggggagct
240
ctgggtgcag gtgggcagac aatgggccaac cacacccct cagccccgct ccagtatcag
300
cattccagac ccaccacct gggcccttgg tcaccgggag acctcacgcg t
351

<210> 2516
<211> 98
<212> PRT
<213> Homo sapiens

<400> 2516
Met Ala His Pro Gly Pro Asp Pro Ser Tyr Pro Ser Asn Ser Pro Thr
1 5 10 15
Thr Gly Gln Leu Glu Tyr Gln Ser Ile Pro Lys Ser Gln Pro Gly Ser
20 25 30
Pro Glu Gly Gly Arg Lys Ser Leu Leu Pro Pro Ser Pro Thr Gly Asn
35 40 45
Ala Ala Gly Gly Leu Arg Glu Ala Thr Gln Trp Gly Ala Leu Gly Ala

50 55 60
 Gly Gly Gln Thr Met Gly Gln His Thr Pro Ser Ala Pro Leu Gln Tyr
 65 70 75 80
 Gln His Ser Arg Pro Thr His Leu Gly Pro Trp Ser Pro Gly Asp Leu
 85 90 95
 Thr Arg

<210> 2517
 <211> 356
 <212> DNA
 <213> Homo sapiens

<400> 2517
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 ggaggtggcc agtgagtcag gaggcggggg ggggggctag ggcttcccca ggggtcagga
 120
 cctgtcacca accaaacccc atgggcctat tcagcagccc caacttggct ggtctggccg
 180
 aggccacaca ttccctgggg actgagctcc aagggtgctgg gtccctgagc aggaagcggc
 240
 cagtgttgag tgggcagtgt ctcaactccag cccctccttc ccaggccagt tcttctcatc
 300
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 356

<210> 2518
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 2518
 Met Gly Ala Glu Gly Glu Asp Lys Arg Arg Trp Pro Val Ser Gln Glu
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 Ala Gly Gly Gly Ala Arg Ala Ser Pro Gly Val Arg Thr Cys His Gln
 20 25 30
 Pro Asn Pro Met Gly Leu Phe Ser Ser Pro Asn Leu Ala Gly Leu Ala
 35 40 45
 Glu Ala Thr His Ser Leu Gly Thr Glu Leu Gln Gly Ala Gly Ser Leu
 50 55 60
 Ser Arg Lys Arg Pro Val Leu Ser Gly Gln Cys Leu Thr Pro Ala Pro
 65 70 75 80
 Pro Ser Gln Ala Ser Ser Ser His Leu Pro Gln Ser Phe Pro Ser Arg
 85 90 95
 Pro Ser Ser Thr Gly Gln Thr
 100

<210> 2519
 <211> 830
 <212> DNA
 <213> Homo sapiens

<400> 2519

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 120
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 180
 tttctctctc tgaaaactgg agctacacct gccccaacag ggcagaatta ccttaaatgg
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 cacaagacaa ttgcacagca gaccacctc ttctccaaag ttttcagggc ccaaaccag
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 360
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 420
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 480
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 660
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 720
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 780
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 830

<210> 2520

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2520

Met Ser Pro Ala Arg Arg Cys Leu Gly Leu Gly Pro Glu Asn Phe Gly
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 Glu Glu Val Gly Leu Leu Cys Asn Cys Leu Val Pro Phe Lys Val Ile
 20 25 30
 Leu Pro Cys Trp Gly Arg Cys Ser Ser Ser Phe Gln Arg Arg Lys Arg
 35 40 45
 Gly Trp Gly Val Ala Gly Arg Gly Ser Ser Arg Pro Glu Ser Gln Ser
 50 55 60
 Arg Trp Arg Ala Ala Ser Thr Arg Phe Leu Leu Val Gly Leu Arg Gln
 65 70 75 80
 Gly Leu Ala Pro Gly Leu Ser Gly Lys Arg Glu Glu Glu Leu Arg Leu
 85 90 95
 Arg Gly Ala Val Leu Pro Arg Arg Leu Thr Gly
 100 105

<210> 2521

<211> 4291

<212> DNA

<213> Homo sapiens

<400> 2521
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120
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420
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480
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 4291

<210> 2522

<211> 952

<212> PRT

<213> Homo sapiens

<400> 2522

Leu Ser Leu Phe Arg Ala Glu Ser Pro Thr Thr Ala Ser Pro Ala Leu
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 Gly Gly Pro Ala Pro Gly Cys Ser Arg Arg Thr Pro Pro Pro Pro Met
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 Ala Pro Leu Ala Leu Val Gly Val Thr Leu Leu Leu Ala Ala Pro Pro
 35 40 45
 Cys Ser Gly Ala Ala Thr Pro Thr Pro Ser Leu Pro Pro Pro Pro Ala
 50 55 60
 Asn Asp Ser Asp Thr Ser Thr Gly Gly Cys Gln Gly Ser Tyr Arg Cys

65					70					75					80
Gln	Pro	Gly	Val	Leu	Leu	Pro	Val	Trp	Glu	Pro	Asp	Asp	Pro	Ser	Leu
				85					90					95	
Gly	Asp	Lys	Ala	Ala	Arg	Ala	Val	Val	Tyr	Phe	Val	Ala	Met	Val	Tyr
			100					105					110		
Met	Phe	Leu	Gly	Val	Ser	Ile	Ile	Ala	Asp	Arg	Phe	Met	Ala	Ala	Ile
		115					120					125			
Glu	Val	Ile	Thr	Ser	Lys	Glu	Lys	Glu	Ile	Thr	Ile	Thr	Lys	Ala	Asn
		130				135					140				
Gly	Glu	Thr	Ser	Val	Gly	Thr	Val	Arg	Ile	Trp	Asn	Glu	Thr	Val	Ser
145					150				155					160	
Asn	Leu	Thr	Leu	Met	Ala	Leu	Gly	Ser	Ser	Ala	Pro	Glu	Ile	Leu	Leu
			165						170					175	
Ser	Val	Ile	Glu	Val	Cys	Gly	His	Asn	Phe	Gln	Ala	Gly	Glu	Leu	Gly
		180						185					190		
Pro	Gly	Thr	Ile	Val	Gly	Ser	Ala	Ala	Phe	Asn	Met	Phe	Val	Val	Ile
		195					200					205			
Ala	Val	Cys	Ile	Tyr	Val	Ile	Pro	Ala	Gly	Glu	Ser	Arg	Lys	Ile	Lys
	210					215					220				
His	Leu	Arg	Val	Phe	Phe	Val	Thr	Ala	Ser	Trp	Ser	Ile	Phe	Ala	Tyr
225					230					235				240	
Val	Trp	Leu	Tyr	Leu	Ile	Leu	Ala	Val	Phe	Ser	Pro	Gly	Val	Val	Gln
			245					250						255	
Val	Trp	Glu	Ala	Leu	Leu	Thr	Leu	Val	Phe	Phe	Pro	Val	Cys	Val	Val
		260					265						270		
Phe	Ala	Trp	Met	Ala	Asp	Lys	Arg	Leu	Leu	Phe	Tyr	Lys	Tyr	Val	Tyr
		275					280					285			
Lys	Arg	Tyr	Arg	Thr	Asp	Pro	Arg	Ser	Gly	Ile	Ile	Ile	Gly	Ala	Glu
	290				295						300				
Gly	Asp	Pro	Pro	Lys	Ser	Ile	Glu	Leu	Asp	Gly	Thr	Phe	Val	Gly	Ala
305				310					315					320	
Glu	Ala	Pro	Gly	Glu	Leu	Gly	Gly	Leu	Gly	Pro	Gly	Pro	Ala	Glu	Ala
			325					330						335	
Arg	Glu	Leu	Asp	Ala	Ser	Arg	Arg	Glu	Val	Ile	Gln	Ile	Leu	Lys	Asp
		340					345						350		
Leu	Lys	Gln	Lys	His	Pro	Asp	Lys	Asp	Leu	Glu	Gln	Leu	Val	Gly	Ile
	355					360						365			
Ala	Asn	Tyr	Tyr	Ala	Leu	Leu	His	Gln	Gln	Lys	Ser	Arg	Ala	Phe	Tyr
	370				375						380				
Arg	Ile	Gln	Ala	Thr	Arg	Leu	Met	Thr	Gly	Ala	Gly	Asn	Val	Leu	Arg
385					390					395				400	
Arg	His	Ala	Ala	Asp	Ala	Ser	Arg	Arg	Ala	Ala	Pro	Ala	Glu	Gly	Ala
			405					410						415	
Gly	Glu	Asp	Glu	Asp	Asp	Gly	Ala	Ser	Arg	Ile	Phe	Phe	Glu	Pro	Ser
		420					425						430		
Leu	Tyr	His	Cys	Leu	Glu	Asn	Cys	Gly	Ser	Val	Leu	Leu	Ser	Val	Thr
	435					440						445			
Cys	Gln	Gly	Gly	Glu	Gly	Asn	Ser	Thr	Phe	Tyr	Val	Asp	Tyr	Arg	Thr
	450					455					460				
Glu	Asp	Gly	Ser	Ala	Lys	Ala	Gly	Ser	Asp	Tyr	Glu	Tyr	Ser	Glu	Gly
465				470					475					480	
Thr	Leu	Val	Phe	Lys	Pro	Gly	Glu	Thr	Gln	Lys	Glu	Leu	Arg	Ile	Gly
			485					490						495	
Ile	Ile	Asp	Asp	Asp	Ile	Phe	Glu	Glu	Asp	Glu	His	Phe	Phe	Val	Arg

500										505					510				
Leu	Leu	Asn	Leu	Arg	Val	Gly	Asp	Ala	Gln	Gly	Met	Phe	Glu	Pro	Asp				
		515					520					525							
Gly	Gly	Gly	Arg	Pro	Lys	Gly	Arg	Leu	Val	Ala	Pro	Leu	Leu	Ala	Thr				
		530				535					540								
Val	Thr	Ile	Leu	Asp	Asp	Asp	His	Ala	Gly	Ile	Phe	Ser	Phe	Gln	Asp				
545					550					555									
Arg	Leu	Leu	His	Val	Ser	Glu	Cys	Met	Gly	Thr	Val	Asp	Val	Arg	Val				
				565					570				575						
Val	Arg	Ser	Ser	Gly	Ala	Arg	Gly	Thr	Val	Arg	Leu	Pro	Tyr	Arg	Thr				
			580					585						590					
Val	Asp	Gly	Thr	Ala	Arg	Gly	Gly	Gly	Val	His	Tyr	Glu	Asp	Ala	Cys				
		595				600						605							
Gly	Glu	Leu	Glu	Phe	Gly	Asp	Asp	Glu	Thr	Met	Lys	Thr	Leu	Gln	Val				
		610				615						620							
Lys	Ile	Val	Asp	Asp	Glu	Glu	Tyr	Glu	Lys	Lys	Asp	Asn	Phe	Phe	Ile				
625					630						635	640							
Glu	Leu	Gly	Gln	Pro	Gln	Trp	Leu	Lys	Arg	Gly	Ile	Ser	Ala	Leu	Leu				
				645					650				655						
Leu	Asn	Gln	Gly	Asp	Gly	Asp	Arg	Lys	Leu	Thr	Ala	Glu	Glu	Glu	Glu				
			660					665						670					
Ala	Arg	Arg	Ile	Ala	Glu	Met	Gly	Lys	Pro	Val	Leu	Gly	Glu	Asn	Cys				
		675					680					685							
Arg	Leu	Glu	Val	Ile	Ile	Glu	Glu	Ser	Tyr	Asp	Phe	Lys	Asn	Thr	Val				
		690				695						700							
Asp	Lys	Leu	Ile	Lys	Lys	Thr	Asn	Leu	Ala	Leu	Val	Ile	Gly	Thr	His				
705					710						715	720							
Ser	Trp	Arg	Glu	Gln	Phe	Leu	Glu	Ala	Ile	Thr	Val	Ser	Ala	Gly	Asp				
				725					730				735						
Glu	Glu	Glu	Glu	Glu	Asp	Gly	Ser	Arg	Glu	Glu	Arg	Leu	Pro	Ser	Cys				
			740					745						750					
Phe	Asp	Tyr	Val	Met	His	Phe	Leu	Thr	Val	Phe	Trp	Lys	Val	Leu	Phe				
		755					760					765							
Ala	Cys	Val	Pro	Pro	Thr	Glu	Tyr	Cys	His	Gly	Trp	Ala	Cys	Phe	Gly				
		770				775						780							
Val	Ser	Ile	Leu	Val	Ile	Gly	Leu	Leu	Thr	Ala	Leu	Ile	Gly	Asp	Leu				
785					790					795	800								
Ala	Ser	His	Phe	Gly	Cys	Thr	Val	Gly	Leu	Lys	Asp	Ser	Val	Asn	Ala				
				805					810				815						
Val	Val	Phe	Val	Ala	Leu	Gly	Thr	Ser	Ile	Pro	Asp	Thr	Phe	Ala	Ser				
			820					825						830					
Lys	Val	Ala	Ala	Leu	Gln	Asp	Gln	Cys	Ala	Asp	Ala	Ser	Ile	Gly	Asn				
		835																	

930 935 940
Ala Tyr Cys His Ile Arg Gly Phe
945 950

<210> 2523
<211> 392
<212> DNA
<213> Homo sapiens

<400> 2523
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ttcagccgaa aaattgttgg tggtgctaca cgctcgacga tgcgtaccga tgcgctgccc
120
atggaggctt tggagcatgc gttaacgact gcagggcgaa ttcattggaaa ccagttaatt
180
caccatagcg atcggggcag ccagtacgtg tcaactgaagt attccaccgc gttagcggaa
240
tccggaatcc gtccgagtgt gggaacagtc ggcgattctt atgacaatgc tctagccgaa
300
acagtcaacg gtctctacaa ggcggaactg attcatgccc aagggtccgtg gacgtcggtc
360
ggagaagtcg aattggccac cttgcggnnn nn
392

<210> 2524
<211> 130
<212> PRT
<213> Homo sapiens

<400> 2524
Xaa Ile Thr Tyr Val Arg Thr Leu Ser Gly Phe Ala Tyr Thr Ala Phe
1 5 10 15
Val Val Asp Val Phe Ser Arg Lys Ile Val Gly Val Ala Thr Arg Ser
20 25 30
Thr Met Arg Thr Asp Ala Leu Pro Met Glu Ala Leu Glu His Ala Leu
35 40 45
Thr Thr Ala Gly Arg Ile His Gly Asn Gln Leu Ile His His Ser Asp
50 55 60
Arg Gly Ser Gln Tyr Val Ser Leu Lys Tyr Ser Thr Ala Leu Ala Glu
65 70 75 80
Ser Gly Ile Arg Pro Ser Val Gly Thr Val Gly Asp Ser Tyr Asp Asn
85 90 95
Ala Leu Ala Glu Thr Val Asn Gly Leu Tyr Lys Ala Glu Leu Ile His
100 105 110
Ala Gln Gly Pro Trp Thr Ser Val Gly Glu Val Glu Leu Ala Thr Leu
115 120 125
Arg Xaa
130

<210> 2525
<211> 378
<212> DNA
<213> Homo sapiens

<400> 2525
 acgcgttctc gggcgagggc atcgagatt tcgaatgcac ggtgatggcg gtgtgccgca
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 tcccccttga atacgtgggtg ctgtcaccgc cgcggaatc aagaaccgca cgttgcgcaa
 120
 atcgtgcgc tacgcaccaa cgtggtcggc aagatgttgg tcagcggcga gccccgnaa
 180
 tgattcatat ctccgatatc agcacgacag gggcgtcatt ccgctctgca catcggttg
 240
 gaagtcagcg gtgcgcccgc acgcctgcga tttcgggtga agacgcgcga ctaccattca
 300
 gaactgggtg cgcgaacact cattcgcagc gagaagccc ccgatttgcc caacacctat
 360
 caatacggcg tggaattc
 378

<210> 2526
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 2526
 Met Ala Val Cys Arg Ile Pro Phe Glu Tyr Val Val Leu Ser Pro Pro
 1 5 10 15
 Arg Glu Ser Arg Thr Ala Arg Cys Ala Asn Arg Cys Ala Thr His Gln
 20 25 30
 Arg Gly Arg Gln Asp Val Gly Gln Arg Arg Ala Pro Xaa Met Ile His
 35 40 45
 Ile Ser Asp Ile Ser Thr Thr Gly Ala Ser Phe Arg Ser Ala His Arg
 50 55 60
 Leu Gly Ser Gln Arg Cys Ala Arg Thr Pro Ala Ile Ser Gly Glu Asp
 65 70 75 80
 Ala Arg Leu Pro Phe Arg Thr Gly Gly Arg Asn Thr His Ser Gln Arg
 85 90 95
 Glu Ala Arg Arg Phe Ala Gln His Leu Ser Ile Arg Arg Gly Ile
 100 105 110

<210> 2527
 <211> 305
 <212> DNA
 <213> Homo sapiens

<400> 2527
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 cagatccaga gagacgacct tggagccagt cccagagca gcagccagcc agaccacggc
 120
 cgctctctcc cccagaagc tcccgacagg ccacatct ccacggcctc cgagacctca
 180
 gtgtactga cctggattcc ccgtgggaat ggtgggttcc caatccagtc cttccgtgtg
 240
 gagtacaaga agctaaagaa agtgggagac tggattctgg ccaccagcg catccccca
 300

cgcgt
305

<210> 2528
<211> 101
<212> PRT
<213> Homo sapiens

<400> 2528
Xaa Val Thr Phe Arg Met Gly Arg Arg Pro Lys Pro Glu Ile Met Ala
1 5 10 15
Ser Lys Glu Gln Gln Ile Gln Arg Asp Asp Leu Gly Ala Ser Pro Gln
20 25 30
Ser Ser Ser Gln Pro Asp His Gly Arg Leu Ser Pro Pro Glu Ala Pro
35 40 45
Asp Arg Pro Thr Ile Ser Thr Ala Ser Glu Thr Ser Val Tyr Val Thr
50 55 60
Trp Ile Pro Arg Gly Asn Gly Gly Phe Pro Ile Gln Ser Phe Arg Val
65 70 75 80
Glu Tyr Lys Lys Leu Lys Lys Val Gly Asp Trp Ile Leu Ala Thr Ser
85 90 95
Ala Ile Pro Pro Arg
100

<210> 2529
<211> 387
<212> DNA
<213> Homo sapiens

<400> 2529
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tgtgtctctcc gtgccccccg agtggcctgc tagcccgctc tcccacacag tctccttgat
120
gtgaagtgtc acccggttg ctgcggcggtg tctccgccgt aacacgtgta taccgggtca
180
gccatggcgg cggtctgtgg gaaggctcct gcgtatgggt ttgccatccg ggaccggggc
240
tttgcctctgc aggggtgggc ttctgagcag aggaaggcca gaggtaacca ggtccatgca
300
cgtttgtgtc tttccacaat gtcgggcttt tatggatgct tttagtctca gtcacaaaag
360
ccatgagctc cacagggttc tgaggga
387

<210> 2530
<211> 121
<212> PRT
<213> Homo sapiens

<400> 2530
Met Ala Phe Val Thr Glu Thr Lys Ser Ile His Lys Ser Pro Thr Leu
1 5 10 15
Trp Lys Asp Thr Asn Val His Gly Pro Gly Tyr Leu Trp Pro Ser Ser

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      20      25      30
Ala Gln Lys Pro Thr Pro Ala Glu Gln Ser Pro Gly Pro Gly Trp Gln
      35      40      45
Ser His Thr Gln Glu Pro Ser Gln Gln Pro Pro Pro Trp Leu Ser Arg
      50      55      60
Tyr Thr Arg Val Thr Ala Glu Thr Arg Arg Ser Lys Pro Gly Asp Thr
      65      70      75      80
Ser His Gln Gly Asp Cys Val Gly Glu Arg Ala Ser Arg Pro Leu Gly
      85      90      95
Gly His Gly Gly His Arg Glu Arg Leu Gln Trp Gln Ser Arg Pro Gly
      100      105      110
Asp Arg Asp Pro Pro Arg Gly Asp Ala
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<210> 2531

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2531

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120
ctcatcagca gccctggaga tgacaaagat agtgctgagg gggaacagac cttcgtcatc
180
agttaaagat atgctagctt ttctttttct tccagacatt cctgaatcca gagaactttc
240
ctgtaatgcg tcaaatcctt taggtctcaa ttcttttccct agagagacaa ggagcacagt
300
tcgttcccaa ggccccccat gcttggcgag ggcgtctctg cttccaggc agggctcctgc
360
tgcctccacc cacgtgcagg gaaaggaagg acgcgt
396

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<210> 2532

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2532

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Met Thr Arg Leu Asn Pro Lys Ser Leu Gln Leu Cys Val Ile Ser Ser
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Ala Ala Leu Glu Met Thr Lys Ile Val Leu Arg Gly Asn Arg Pro Ser
      20      25      30
Ser Ser Val Lys Asp Met Leu Ala Phe Leu Phe Leu Pro Asp Ile Pro
      35      40      45
Glu Ser Arg Glu Leu Ser Cys Asn Ala Ser Asn Pro Leu Gly Leu Asn
      50      55      60
Ser Phe Pro Arg Glu Thr Arg Ser Thr Val Arg Ser Gln Gly Pro Pro
      65      70      75      80
Cys Leu Ala Arg Ala Ser Leu Leu Ser Arg Gln Gly Pro Ala Ala Ser
      85      90      95
Thr His Val Gln Gly Lys Glu Gly Arg

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100

105

<210> 2533
 <211> 495
 <212> DNA
 <213> Homo sapiens

<400> 2533
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 gctgtggcan ccccatgga cgtgatcaag tcgagactgc aggcagacgg gcagggccag
 120
 aggcgctacc ggggtctcct gcactgtatg gtgaccagcg ttcgagagga gggaccccg
 180
 gtccttttca aggggctggt actcaattgc tgccgcgcct tccctgtcaa catggtggtc
 240
 ttcgtgcct atgaggcagt gctgaggctc gcccggggctc tgctcacata gccggtcccc
 300
 acgcccagcg gccacccac cagcagctgc tggaggctcgt agtggctgga ggaggcaagg
 360
 ggtagtgtgg ctgggttcgg gacccacag ggccattgcc caggagaatg aggagcctcc
 420
 ctgcagtgtt gtcggccgag gcctgagctc gccctgcca gctactgacc tcaggtcgag
 480
 gggcccgcca gccat
 495

<210> 2534
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 2534
 Xaa Arg Pro Asp Val Pro Gly Val Leu Val Ala Gly Gly Cys Ala Gly
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 Val Leu Ala Trp Ala Val Ala Xaa Pro Met Asp Val Ile Lys Ser Arg
 20 25 30
 Leu Gln Ala Asp Gly Gln Gly Gln Arg Arg Tyr Arg Gly Leu Leu His
 35 40 45
 Cys Met Val Thr Ser Val Arg Glu Glu Gly Pro Arg Val Leu Phe Lys
 50 55 60
 Gly Leu Val Leu Asn Cys Cys Arg Ala Phe Pro Val Asn Met Val Val
 65 70 75 80
 Phe Val Ala Tyr Glu Ala Val Leu Arg Leu Ala Arg Gly Leu Leu Thr
 85 90 95

<210> 2535
 <211> 1904
 <212> DNA
 <213> Homo sapiens

<400> 2535
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cgtcggtggt aggctgctac catgagggtg aatcagaaca ccttgctgct ggggaagaag
120
gtggctccttg taccctacac ctcggagcat gtgcccagca ggtaccacga gtggatgaaa
180
tcagaggagc tgcagcgttt gacagcctcg gagccgctga ccctggagca ggagtatgcc
240
atgcagtgca gctggcagga agatgcagac aagtgtacct tcattgtgct ggatgccgag
300
aagtggcagg cccagccagg cgccaccgaa gagagctgca tgggtgggaga cgtgaacctc
360
ttcctcacag atctagaaga ccccacctg ggggagatcg aggtcatgat tgcagagccc
420
agctgcaggg gtaagggcct tggcactgag gccgttctcg cgatgctgtc ttacggagtg
480
accacgctag gtctgaccaa gtttgaggct aaaattgggc aaggaaatga accaagcatc
540
cggatgttcc agaaacttca ctttgagcag gtggctacga gcagtgtttt tcaggaggtg
600
accctcagac tgacagttag tgagtccgag catcagtggc ttctggagca gaccagccac
660
gtggaagaga agccttacag agatgggtcg gcagagccct gctgatggct gggccttgtg
720
ggcagccact ctgtgtgagc aggggtgttg gcccatacac ttcaaagacc agagccctgc
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900
gccagttccc ttctccctc ccggccaaac ccagaccag actctaggaa gctggaatgg
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1020
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1080
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1140
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1200
gcagaggcag gctggtgtga ccctgggaac ttgaccggg aacaacaggt ggtccagagt
1260
gagtgtggcc tggccctca acctagtgtc cgtcctctc tctcctggag ccagtcttga
1320
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1380
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1440
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1560
ggctacctgg caccctatgg cttacaaagt agagtggcc cagtttcctt ccacctgagg
1620
ggagcactct gactcctaac agtcttcctt gccctgcat catctggggg ggctggctgt
1680

caagaaaggc cgggcatgct ttctaaacac agccacagga ggcttgtagg gcatcttcca
 1740
 ggtggggaaa cagtcttaga taagtaaggt gacttgcta aggcctccca gcacccttga
 1800
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 1860
 aaaacaaaca ttataaaacg aaaaaaaaaa aaaaaaaaaag tact
 1904

<210> 2536
 <211> 207
 <212> PRT
 <213> Homo sapiens

<400> 2536
 Met Arg Leu Asn Gln Asn Thr Leu Leu Leu Gly Lys Lys Val Val Leu
 1 5 10 15
 Val Pro Tyr Thr Ser Glu His Val Pro Ser Arg Tyr His Glu Trp Met
 20 25 30
 Lys Ser Glu Glu Leu Gln Arg Leu Thr Ala Ser Glu Pro Leu Thr Leu
 35 40 45
 Glu Gln Glu Tyr Ala Met Gln Cys Ser Trp Gln Glu Asp Ala Asp Lys
 50 55 60
 Cys Thr Phe Ile Val Leu Asp Ala Glu Lys Trp Gln Ala Gln Pro Gly
 65 70 75 80
 Ala Thr Glu Glu Ser Cys Met Val Gly Asp Val Asn Leu Phe Leu Thr
 85 90 95
 Asp Leu Glu Asp Pro Thr Leu Gly Glu Ile Glu Val Met Ile Ala Glu
 100 105 110
 Pro Ser Cys Arg Gly Lys Gly Leu Gly Thr Glu Ala Val Leu Ala Met
 115 120 125
 Leu Ser Tyr Gly Val Thr Thr Leu Gly Leu Thr Lys Phe Glu Ala Lys
 130 135 140
 Ile Gly Gln Gly Asn Glu Pro Ser Ile Arg Met Phe Gln Lys Leu His
 145 150 155 160
 Phe Glu Gln Val Ala Thr Ser Ser Val Phe Gln Glu Val Thr Leu Arg
 165 170 175
 Leu Thr Val Ser Glu Ser Glu His Gln Trp Leu Leu Glu Gln Thr Ser
 180 185 190
 His Val Glu Glu Lys Pro Tyr Arg Asp Gly Ser Ala Glu Pro Cys
 195 200 205

<210> 2537
 <211> 509
 <212> DNA
 <213> Homo sapiens

<400> 2537
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 gatgtcatcg tgctgcgggtt ttccggagcc atggcgaagc gtccctgctc agttatcctt
 120
 ccgctgctac tgctcggaactc ccccgctcatt gcgtgggtggc ccttctccgg ccctgacaac
 180

ctcgccctcgg accccatcgg agcccttgcg gaccgccgca tcaccgactc ggcagctgac
 240
 aaagatccgt gcaaagccct catacgccgt gcggctcacc taaccgaggg tgactccgac
 300
 ctgtgttggg ctcgaccac cagctggaga gccctagctg cagcagcttt ggatcaacat
 360
 ccagcgaccg tcaagtgcg tcgggtagag tcagccgcg gtaatgcgcc ggcgatgctg
 420
 ctggcagcct ggctaggatt gcgtctcggc gtcccggctg agcgggtgac aaccgacgag
 480
 cccggcatct ccgcgatcgt catgtcgac
 509

<210> 2538
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 2538
 Thr Arg Ser Arg Lys Asp Lys Leu Asp Ala Glu Val His Ala Gly Glu
 1 5 10 15
 Gly Thr Pro Gly Asp Val Ile Val Leu Arg Phe Ser Gly Ala Met Ala
 20 25 30
 Lys Arg Pro Ala Ser Val Ile Leu Pro Leu Leu Leu Ser Asp Ser Pro
 35 40 45
 Val Ile Ala Trp Trp Pro Phe Ser Gly Pro Asp Asn Leu Ala Ser Asp
 50 55 60
 Pro Ile Gly Ala Leu Ala Asp Arg Arg Ile Thr Asp Ser Ala Ala Asp
 65 70 75 80
 Lys Asp Pro Cys Lys Ala Leu Ile Arg Arg Ala Ala His Leu Thr Glu
 85 90 95
 Gly Asp Ser Asp Leu Cys Trp Ala Arg Thr Thr Ser Trp Arg Ala Leu
 100 105 110
 Ala Ala Ala Ala Leu Asp Gln His Pro Ala Thr Val Lys Phe Ala Arg
 115 120 125
 Val Glu Ser Ala Ala Gly Asn Ala Pro Ala Met Leu Leu Ala Ala Trp
 130 135 140
 Leu Gly Leu Arg Leu Gly Val Pro Val Glu Arg Val Thr Thr Asp Ala
 145 150 155 160
 Pro Gly Ile Ser Ala Ile Val Met Ser
 165

<210> 2539
 <211> 453
 <212> DNA
 <213> Homo sapiens

<400> 2539
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 tcgcggcatg acccgaggat agtgacgtgg gacaatggct acgtgcgttt tctcaacgag
 120
 cagccgaact acgacctgac gtatgacgac gtcttcatgg caccaaaccg ttctcgggtg
 180

gggtcccgca tgaacgtcga cctcacgtca acagacgggc taggcactcc tctgcccctc
 240
 gtagtggcca atatgaccgc aatttcggga cgtcgcatgg cagagaccat cgccaggcgc
 300
 ggaggcattg ctgttctgcc ccaagatata ccggcggatt tcgtcgcccg gtccattcgg
 360
 cgcgtcaaag atgcgcatac tcgattcgac accccagtca ccgtcaaccc gacaacgact
 420
 gtcggtgagg ccatgaactt gctcaacaag cgc
 453

<210> 2540

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2540

Phe	Ala	Ala	Ser	Arg	His	Asp	Pro	Arg	Ile	Val	Thr	Trp	Asp	Asn	Gly
1				5					10					15	
Tyr	Val	Arg	Phe	Leu	Asn	Glu	Gln	Pro	Asn	Tyr	Asp	Leu	Thr	Tyr	Asp
		20						25					30		
Asp	Val	Phe	Met	Ala	Pro	Asn	Arg	Ser	Ser	Val	Gly	Ser	Arg	Met	Asn
		35					40					45			
Val	Asp	Leu	Thr	Ser	Thr	Asp	Gly	Leu	Gly	Thr	Pro	Leu	Pro	Leu	Val
	50					55				60					
Val	Ala	Asn	Met	Thr	Ala	Ile	Ser	Gly	Arg	Arg	Met	Ala	Glu	Thr	Ile
65				70					75				80		
Ala	Arg	Arg	Gly	Gly	Ile	Ala	Val	Leu	Pro	Gln	Asp	Ile	Pro	Ala	Asp
			85					90					95		
Phe	Val	Ala	Arg	Ser	Ile	Arg	Arg	Val	Lys	Asp	Ala	His	Thr	Arg	Phe
		100						105					110		
Asp	Thr	Pro	Val	Thr	Val	Asn	Pro	Thr	Thr	Thr	Val	Gly	Glu	Ala	Met
		115					120						125		
Asn	Leu	Leu	Asn	Lys	Arg										
															130

<210> 2541

<211> 564

<212> DNA

<213> Homo sapiens

<400> 2541

accggtctcc cacggagttc tgtttcctca ggtactgcac tgtatacaac tctaaatgca
 60
 ccctgcatgg aaccattgc agggcacacg cagtctacat gtatcccagg ttttatgctc
 120
 acagagcctg caatactccg tgtctggaat acgttatttg ctgcacacct ccagaggaa
 180
 catgtaacgt ctgtgtaaca tgctatcctg cacacatctg aaagaatctg tgtacacaa
 240
 actattatgc tgtgcacaca tttcctcata ttctgtgtag agagcacctc atttgtact
 300
 caaatattcg gottccataa caagttacat tgctcacatc ttaaaatatt cattacacgt
 360

gaaaccaccg catggtaccg acatccttct ggaatgtccc gcacagaggc tgatatatgt
 420
 gcacagttct cactgttctg cgtgcccage ccctcacact ggacgcccac ctcacactct
 480
 tctgccaaagg gagacttttg ttctcccctt ccctgtgctg gctgtgcggg ccacagtctt
 540
 ctgcacgcca gcagcatgac gcgt
 564

<210> 2542

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2542

Met	Leu	Cys	Thr	His	Phe	Leu	Ile	Phe	Cys	Val	Glu	Ser	Thr	Ser	Phe
1				5				10						15	
Cys	Thr	Gln	Ile	Phe	Gly	Phe	His	Asn	Lys	Leu	His	Cys	Ser	His	Leu
		20					25					30			
Lys	Ile	Phe	Ile	Thr	Arg	Glu	Thr	Thr	Ala	Trp	Tyr	Arg	His	Pro	Ser
		35				40					45				
Gly	Met	Ser	Arg	Thr	Glu	Ala	Asp	Ile	Cys	Ala	Gln	Phe	Ser	Leu	Phe
	50				55				60						
Cys	Val	Pro	Ser	Pro	Ser	His	Trp	Thr	Pro	Thr	Ser	His	Ser	Ser	Ala
65				70				75						80	
Lys	Gly	Asp	Phe	Gly	Ser	Pro	Leu	Pro	Cys	Ala	Gly	Cys	Ala	Gly	His
		85					90							95	
Ser	Pro	Leu	His	Ala	Ser	Ser	Met	Thr	Arg						
		100					105								

<210> 2543

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2543

cgctgaagg gggcggggaa aatggaatgg gggggaaggg cgcggtggg gacatgctgg
 60
 aacgtgccca tgctttctgc accacactgg atgactgaag gggaaggaac gagcgtctta
 120
 ccgctcctga tgagattttt gtttttgcct aacaaagaaa tgtgtatgaa tgcacgtctg
 180
 tttgcagggg cagggaggag gagggtcctt ggaatagctg ccgacaacag ctggaactcc
 240
 tgtctgggtc cccagctgg gctagagagg gcagtgatca tctgtccact ggacaggaag
 300
 gtttgcaaag ggctgtttgc ttactgggtc ccaattttta gccttctgaa gccctgtcc
 360
 aatggggccc agcaggcagc agtgctg
 387

<210> 2544

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2544

```

Met Glu Trp Gly Gly Arg Ala Arg Val Gly Thr Cys Trp Asn Val Pro
 1           5           10           15
Met Leu Ser Ala Pro His Trp Met Thr Glu Gly Glu Gly Thr Ser Val
          20           25           30
Leu Pro Leu Leu Met Arg Phe Leu Phe Leu Pro Asn Lys Glu Met Cys
          35           40           45
Met Asn Ala Arg Leu Phe Ala Gly Ala Gly Arg Arg Arg Val Leu Gly
          50           55           60
Ile Ala Ala Asp Asn Ser Trp Asn Ser Cys Leu Gly Pro Pro Ala Gly
65           70           75           80
Leu Glu Arg Ala Val Ile Ile Cys Pro Leu Asp Arg Lys Val Cys Lys
          85           90           95
Gly Leu Phe Ala Tyr Trp Val Pro Ile Phe Ser Leu Leu Lys Pro Leu
          100          105          110
Ser Asn Gly Ala Gln Gln Ala Ala Val Leu
          115          120

```

<210> 2545

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2545

```

gcgattattt tcgtgctgcc cggacttata atggctcggct ggtggtcagg tttcccgta
60
tggaaccaccc tcgtatctgt tctagtcggc ggcacccctcg gcgttatgta ctcgattccg
120
ctgcgtcggg cctcgtgac aggcctcgat cttccctacc cggaggcgt cgcaggagct
180
gaggtgctca aagtaggcga ttccgctggt gccgccgagg ctaacaaggt gggctctgca
240
gtcatcatcg tcggttctgt ggtctctgca gcgtacgccc tggtgtcgga tcttaagctt
300
gtgaagtcgg cgctgaccaa gcctttcaag acgggc
336

```

<210> 2546

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2546

```

Ala Ile Ile Phe Val Leu Pro Gly Leu Ile Met Val Gly Trp Trp Ser
 1           5           10           15
Gly Phe Pro Tyr Trp Thr Thr Leu Ala Ile Cys Leu Val Gly Gly Ile
          20           25           30
Leu Gly Val Met Tyr Ser Ile Pro Leu Arg Arg Ala Leu Val Thr Gly
          35           40           45
Ser Asp Leu Pro Tyr Pro Glu Gly Val Ala Gly Ala Glu Val Leu Lys
          50           55           60
Val Gly Asp Ser Ala Gly Ala Ala Glu Ala Asn Lys Val Gly Leu Arg

```

```

65          70          75          80
Val Ile Ile Val Gly Ser Val Val Ser Ala Ala Tyr Ala Leu Leu Ser
          85          90          95
Asp Leu Lys Leu Val Lys Ser Ala Leu Thr Lys Pro Phe Lys Thr Gly
          100          105          110

```

<210> 2547
 <211> 556
 <212> DNA
 <213> Homo sapiens

```

<400> 2547
acgcgtgcac acacacacac gcaggcgtac acgctcaca gtgcacacac acatatgagt
60
ttccacaca ttcaccata tcactttctc tttacttttt aaagacaggg cacttgcctt
120
tatggccaat aatattatgc ccaagctaca acattccgag tcaatcaca aggttataaa
180
cttcatttga actgaagacc acctgtaagc acgcagctca aatgttctca cctagaaatt
240
caagtgtgtg ttggaagtg gacttaacgg tcaaagaaaa aggcctggcc aacttcagag
300
agggacaccc agccctgcta cgttgcgtgt cattatgtgg tgctgtgcta tccatagaga
360
aagaggagat gaaaaagatt ctacaaagag agatcaaact gcaagaaagc acaaagattt
420
catcaccaca atatgaaggc ctcccttgga taaatgactt ttttaggtcc caataagaaa
480
taccatctat tctatctgga attattttat tagcttcaaa ttttattcta agattcatac
540
tatcagatca tctaga
556

```

<210> 2548
 <211> 106
 <212> PRT
 <213> Homo sapiens

```

<400> 2548
Met Asn Leu Arg Ile Lys Phe Glu Ala Asn Lys Ile Ile Pro Asp Arg
1          5          10          15
Ile Asp Gly Ile Ser Tyr Trp Asp Leu Lys Lys Ser Phe Ile Pro Arg
20          25          30
Arg Pro Ser Tyr Cys Gly Asp Glu Ile Phe Val Leu Ser Cys Ser Leu
35          40          45
Ile Ser Leu Cys Arg Ile Phe Phe Ile Ser Ser Phe Ser Met Asp Ser
50          55          60
Thr Ala Pro His Asn Asp Thr Gln Arg Ser Arg Ala Gly Cys Pro Ser
65          70          75          80
Leu Lys Leu Ala Arg Pro Phe Ser Leu Thr Val Lys Ser Thr Phe Gln
85          90          95
Thr Gln Leu Glu Phe Leu Gly Glu Asn Ile
100          105

```

<210> 2549
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 2549
 nnccagcctc tctccgaccg cgtacgtatt gaatttgata aagaagccaa cacggttggt
 60
 atcgatgata atggtgtcgg catgtctcgt gaagaagcca ttacaaactt aggtacgatt
 120
 gctaaatcgg gcacctcttc tttcttagag caattgagtg gcgatcagaa aaaagacagc
 180
 caacttattg gtcaattcgg tgtaggcttt tactctgctt tcatcggtgc tgataaagta
 240
 acagtagaaa cacgtcgcgc aggtgcgacg gaaaatgaag cggttcgctg ggtatctgat
 300
 ggttctggtg aatttactat tgagacgacg gataaagcga ctcggtgtac acgcattact
 360
 ttgcatctga aagcagatga aaaagatttc gcagacaact tccgtctacg ttcattagta
 420
 acaaaatatt ctgat
 435

<210> 2550
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 2550
 Xaa Gln Pro Leu Ser Asp Arg Val Arg Ile Glu Phe Asp Lys Glu Ala
 1 5 10 15
 Asn Thr Val Val Ile Asp Asp Asn Gly Val Gly Met Ser Arg Glu Glu
 20 25 30
 Ala Ile Thr Asn Leu Gly Thr Ile Ala Lys Ser Gly Thr Ser Ser Phe
 35 40 45
 Leu Glu Gln Leu Ser Gly Asp Gln Lys Lys Asp Ser Gln Leu Ile Gly
 50 55 60
 Gln Phe Gly Val Gly Phe Tyr Ser Ala Phe Ile Val Ala Asp Lys Val
 65 70 75 80
 Thr Val Glu Thr Arg Arg Ala Gly Ala Thr Glu Asn Glu Ala Val Arg
 85 90 95
 Trp Val Ser Asp Gly Ser Gly Glu Phe Thr Ile Glu Thr Ile Asp Lys
 100 105 110
 Ala Thr Arg Gly Thr Arg Ile Thr Leu His Leu Lys Ala Asp Glu Lys
 115 120 125
 Asp Phe Ala Asp Asn Phe Arg Leu Arg Ser Leu Val Thr Lys Tyr Ser
 130 135 140
 Asp
 145

<210> 2551
 <211> 403
 <212> DNA
 <213> Homo sapiens

<400> 2551
 nngccggcca gcctcacatc agtctctccg ccccggggaa ggctcagcac tttaaatacga
 60
 ggactccact tctggggacg cctgggtcgt tcgcccacca ggctaggct acgctccatg
 120
 ctccccagc aatctctgtc tacacctctc gcggcgccct gccctctctc gaccccttc
 180
 cagccannaa gtccccccac cccttcagag aagcagcctc aaattccaga agtggaggct
 240
 ccagcctccc cgcgaggtag cagccccaca gtcttctggg agccattgtg gccagggacg
 300
 gcctctggac tgccaggctg ggttggggac cagggaaacat cggctctactc aggtgtgagg
 360
 gggcaggtct ggctgcccc aaagtggct ccatcctgga can
 403

<210> 2552
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 2552
 Xaa Pro Ala Ser Leu Thr Ser Val Ser Pro Pro Arg Gly Arg Leu Ser
 1 5 10 15
 Thr Leu Asn Arg Gly Leu His Phe Trp Gly Arg Leu Val Arg Ser Pro
 20 25 30
 Thr Arg Pro Arg Leu Arg Ser Met Leu Pro Gln Gln Ser Leu Ser Thr
 35 40 45
 Pro Pro Ala Ala Pro Cys Pro Pro Pro Thr Pro Phe Gln Pro Xaa Ser
 50 55 60
 Pro Pro Thr Pro Ser Glu Lys Gln Pro Gln Ile Pro Glu Val Glu Ala
 65 70 75 80
 Pro Ala Ser Pro Arg Gly Thr Ser Pro Thr Val Phe Trp Glu Pro Leu
 85 90 95
 Trp Pro Gly Thr Ala Ser Gly Leu Pro Gly Trp Val Gly Asp Gln Gly
 100 105 110
 Thr Ser Val Tyr Ser Gly Val Arg Gly Gln Val Trp Pro Ala Pro Lys
 115 120 125
 Leu Ala Pro Ser Trp Thr
 130

<210> 2553
 <211> 380
 <212> DNA
 <213> Homo sapiens

<400> 2553
 actagtgtcc ctataagaaa aggaaaggac caagacacag gaaagatgaa gcagagattg
 60
 gagagataca gcatggggcca aggagcactg ggagccagca gcagctggaa gaggcaggag
 120
 gcatectccc tagaccgcac aggatgctac tgggtgagcc tgctgtcctg gaaaaggcgt
 180

gaagtctgcc tgagtgggca ggggcttctg cgcagcaccc agcaaggcca aggtggaagg
 240
 gacctctctg gccctgttcc tggtccacc ctcagctgct ggcaggtggg tcaccaggcc
 300
 tctgccccaa gaaactcctg caggcagctc tggacccct gtcttacaca cttctcact
 360
 gagcctgcca gcatcccagn
 380

<210> 2554
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 2554
 Met Lys Gln Arg Leu Glu Arg Tyr Ser Met Gly Gln Gly Ala Leu Gly
 1 5 10 15
 Ala Ser Ser Ser Trp Lys Arg Gln Glu Ala Ser Ser Leu Asp Arg Thr
 20 25 30
 Gly Cys Tyr Trp Val Ser Leu Leu Ser Trp Lys Arg Arg Glu Val Cys
 35 40 45
 Leu Ser Gly Gln Gly Leu Leu Arg Ser Thr Gln Gln Gly Gln Gly Gly
 50 55 60
 Arg Asp Pro Pro Gly Pro Cys Pro Gly Ser Thr Leu Ser Cys Trp Gln
 65 70 75 80
 Val Gly His Gln Ala Ser Ala Gln Arg Asn Ser Cys Arg Gln Leu Trp
 85 90 95
 Thr Pro Cys Leu Thr His Leu Leu Thr Glu Pro Ala Ser Ile Pro
 100 105 110

<210> 2555
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 2555
 ntccggatgg aaaagtaaag accagcaata gccataaag ccattaacac atacccatat
 60
 atgttggttaa tgctgcccgg tagttcgggtg gcattcttca tgggcaatag tttaatggga
 120
 gataacgcga ataatggtag tgctcgttcta gtgctcacag acctggtcac ccaaatagaa
 180
 ggatttatat cctcccatat cctcattttt gtgctcgttg gcctcggcat tgtctttacc
 240
 gttgccactc gaggtgtaca gttccgcctc ttcgggcaca tgtggcacct catgctcgat
 300
 tcacggaagc aaaagggcac ctccctctcc agctctcaag cattcacagt gggctctgat
 360
 cacgcggn
 368

<210> 2556
 <211> 102
 <212> PRT

<213> Homo sapiens

<400> 2556

```

Met Leu Leu Met Leu Pro Gly Ser Ser Val Ala Phe Phe Met Gly Asn
 1             5             10             15
Ser Leu Met Gly Asp Asn Ala Asn Asn Gly Ser Val Val Leu Val Leu
      20             25             30
Thr Asp Leu Val Thr Gln Ile Glu Gly Phe Ile Ser Ser His Ile Leu
      35             40             45
Ile Phe Val Leu Val Gly Leu Gly Ile Val Phe Thr Val Ala Thr Arg
      50             55             60
Gly Val Gln Phe Arg Leu Phe Gly His Met Trp His Leu Met Leu Asp
65             70             75             80
Ser Arg Lys Gln Lys Gly Thr Ser Leu Ser Ser Ser Gln Ala Phe Thr
      85             90             95
Val Gly Leu Asp His Ala
      100

```

<210> 2557

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2557

```

atcactactc cagttggtga ggcagttctg ggtcgcatct taaatgtgat cggtagagccg
60
attgatgaga tgggcccgagt taacgcgaaa gaaaaatggg aaattcacccg tccagctcct
120
aaattcgaag accaagctgt taaagctgag atgttgatga ctggtattaa ggtagctgat
180
cttcttgac cttacgcaaa gggtaggcaag atcgggtctct tcggtaggtgc gggcgtaggt
240
aaaacagttt tgattcaaga gttgattcgt aacatcgcta ctgagcacgg tggatactct
300
gtattcgcag gtgtcggcga gcgtactcgc gaaggtaacg atctttgggt tgagatgaaa
360
gaatcaggcg ttatcgcaaa gaccgcactt gtattcgggtc agatgaat
408

```

<210> 2558

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2558

```

Ile Thr Thr Pro Val Gly Glu Ala Val Leu Gly Arg Ile Leu Asn Val
 1             5             10             15
Ile Gly Glu Pro Ile Asp Glu Met Gly Pro Val Asn Ala Lys Glu Lys
      20             25             30
Trp Glu Ile His Arg Pro Ala Pro Lys Phe Glu Asp Gln Ala Val Lys
      35             40             45
Ala Glu Met Leu Met Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro
      50             55             60
Tyr Ala Lys Gly Gly Lys Ile Gly Leu Phe Gly Gly Ala Gly Val Gly

```

65		70		75		80									
Lys	Thr	Val	Leu	Ile	Gln	Glu	Leu	Ile	Arg	Asn	Ile	Ala	Thr	Glu	His
			85						90					95	
Gly	Gly	Tyr	Ser	Val	Phe	Ala	Gly	Val	Gly	Glu	Arg	Thr	Arg	Glu	Gly
		100						105					110		
Asn	Asp	Leu	Trp	Val	Glu	Met	Lys	Glu	Ser	Gly	Val	Ile	Ala	Lys	Thr
		115					120						125		
Ala	Leu	Val	Phe	Gly	Gln	Met	Asn								
		130					135								

<210> 2559

<211> 389

<212> DNA

<213> Homo sapiens

<400> 2559

tccttgaaga tgaacatctt tcggctgcaa actgaaaagg atttgaatcc tcagaaaaca
60
gcttttctga aagatcgact gaatgcaata caggaagagc attctaagga cctgaagctg
120
ttgcatctcg aagttatgaa ttgctgccag caactgagag ctgtaaaaga ggaagaagac
180
aaggcacaag atgaggtgca aaggttgact gccactctga agattgcctc gcagacaaag
240
aagaatgcag ccattattga agaggaactg aagaccacaa aacgtaaaat gaaccttaaa
300
attcaagagc ttctagagat gacctcattt ccaagttggt tgaagaaaat aagaacctgc
360
aggatatctt tcaacaggaa catgaagaa
389

<210> 2560

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2560

Ser	Leu	Lys	Met	Asn	Ile	Phe	Arg	Leu	Gln	Thr	Glu	Lys	Asp	Leu	Asn
1				5				10						15	
Pro	Gln	Lys	Thr	Ala	Phe	Leu	Lys	Asp	Arg	Leu	Asn	Ala	Ile	Gln	Glu
			20					25					30		
Glu	His	Ser	Lys	Asp	Leu	Lys	Leu	Leu	His	Leu	Glu	Val	Met	Asn	Leu
			35				40					45			
Arg	Gln	Gln	Leu	Arg	Ala	Val	Lys	Glu	Glu	Glu	Asp	Lys	Ala	Gln	Asp
			50				55				60				
Glu	Val	Gln	Arg	Leu	Thr	Ala	Thr	Leu	Lys	Ile	Ala	Ser	Gln	Thr	Lys
65					70					75				80	
Lys	Asn	Ala	Ala	Ile	Ile	Glu	Glu	Glu	Leu	Lys	Thr	Thr	Lys	Arg	Lys
			85					90					95		
Met	Asn	Leu	Lys	Ile	Gln	Glu	Leu	Leu	Glu	Met	Thr	Ser	Phe	Pro	Ser
			100					105					110		
Trp	Leu	Lys	Lys	Ile	Arg	Thr	Cys	Arg	Ile	Ser	Phe	Asn	Arg	Asn	Met
			115				120						125		

Lys

<210> 2561
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 2561
 nnactcacca ctgtgggttct actatgcctt ctgaccccggt cttggacttc aactgggaga
 60
 atgtggagcc atttgaacag gtcctctctt tggagcatat tttcttctgt cacttgtaga
 120
 aaagctgtat tggattgtga ggcaatgaaa acaaataaat tcccttctcc atgtttggac
 180
 tcaaagacta aggtgggttat gaagggtcaa aatgtatcta tgttttgttc ccataagaac
 240
 aaatcactgc agatcaccta ttcattgttt cgacgtaaga cacacctggg aaccaggat
 300
 ggaaaagggtg aacctgcat ttttaaccta agcatcacag aagcccatga atcaggcccc
 360
 taaaaatgca aagcccaagt taccagctgt tcaaaatata gtcgtgactt cagcttcacg
 420
 attgtcgac
 429

<210> 2562
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2562
 Xaa Leu Thr Thr Val Val Leu Leu Cys Leu Leu Thr Pro Ser Trp Thr
 1 5 10 15
 Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu Phe Trp Ser
 20 25 30
 Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp Cys Glu Ala
 35 40 45
 Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser Lys Thr Lys
 50 55 60
 Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser His Lys Asn
 65 70 75 80
 Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys Thr His Leu
 85 90 95
 Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn Leu Ser Ile
 100 105 110
 Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala Gln Val Thr
 115 120 125
 Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile Val Asp
 130 135 140

<210> 2563
 <211> 267
 <212> DNA
 <213> Homo sapiens

<400> 2563
 ggatcccaga cgagtgcctgg cagcagtatg ggggccgtgg gggcgacggc caccgtcagc
 60
 accccgggtca ccatccagaa catgacctcc tcttatgtca ccatcacatc ccatgtcctt
 120
 aaggccttta ccctttggga acaggcagag gccctcaca ggaagaacaa agaattcttt
 180
 gctcagctca gcacaaaagt gcgcgtgttg gccctcaaca gcagcctggg ggacctgggtg
 240
 cactacacaa ggcagggcct ccagcgg
 267

<210> 2564
 <211> 89
 <212> PRT
 <213> Homo sapiens

<400> 2564
 Gly Ser Gln Thr Ser Ala Gly Ser Ser Met Gly Ala Val Gly Ala Thr
 1 5 10 15
 Ala Thr Val Ser Thr Pro Val Thr Ile Gln Asn Met Thr Ser Ser Tyr
 20 25 30
 Val Thr Ile Thr Ser His Val Leu Lys Ala Phe Thr Leu Trp Glu Gln
 35 40 45
 Ala Glu Ala Leu Thr Arg Lys Asn Lys Glu Phe Phe Ala Gln Leu Ser
 50 55 60
 Thr Lys Val Arg Val Leu Ala Leu Asn Ser Ser Leu Val Asp Leu Val
 65 70 75 80
 His Tyr Thr Arg Gln Gly Leu Gln Arg
 85

<210> 2565
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 2565
 cttcgactg ctccgcgagt tcttggggga gtgagcacag cgcgtaagct cagccacgtg
 60
 tggttcgaat tcgattcctt ggtcaatgcc cgtgacgtgg gcggaatccc caccctcgat
 120
 gggccggtga aatcccagcg actgatccgc agcgacaacc tgcaggccct caccgaggcc
 180
 gacatcgccc agttgcagca actcgggtgc tccgatgtgg tcgatctgcg ttccacctat
 240
 gaggtggcca gcgagggccc ggggccgtg accgggcgtg gggtgaccat ccacccccat
 300
 tccttctgc cgcaccagca cgccaatgtg cac
 333

<210> 2566
 <211> 111
 <212> PRT

<213> Homo sapiens

<400> 2566

```

Leu Arg Thr Ala Pro Arg Val Leu Gly Gly Val Ser Thr Ala Arg Lys
 1             5             10             15
Leu Ser His Val Trp Phe Glu Phe Asp Ser Leu Val Asn Ala Arg Asp
      20             25             30
Val Gly Gly Ile Pro Thr Pro Asp Gly Pro Val Lys Ser Gln Arg Leu
      35             40             45
Ile Arg Ser Asp Asn Leu Gln Ala Leu Thr Glu Ala Asp Ile Ala Gln
      50             55             60
Leu Gln Gln Leu Gly Val Ser Asp Val Val Asp Leu Arg Ser Thr Tyr
65             70             75             80
Glu Val Ala Ser Glu Gly Pro Gly Pro Leu Thr Gly Arg Gly Val Thr
      85             90             95
Ile His Pro His Ser Phe Leu Pro Asp Gln His Ala Asn Val His
      100            105            110

```

<210> 2567

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2567

```

ngaattcaaa ctggtgttcg tatgggccat aagcaaggta catatacgat gcgttttaga
60
agccagttca cagatcaacg tctattcgga accgatcaat ttagtattgg tgggcgctat
120
tctgtacgag gtttttagtg agaagaaacc ttaagagggtg actcgggcta ttatgtacaa
180
aatgaatggg cattaccatt tagaaaacaa caaattactc catatgtagg gatagatatt
240
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300
gttggtgtac gtggtatggt tgggtgacgat gtaaactatg atgtatcact aggaacacca
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396

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<210> 2568

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2568

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Xaa Ile Gln Thr Gly Val Arg Met Gly His Lys Gln Gly Thr Tyr Thr
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Met Arg Phe Arg Ser Gln Phe Thr Asp Gln Arg Leu Phe Gly Thr Asp
      20             25             30
Gln Phe Ser Ile Gly Gly Arg Tyr Ser Val Arg Gly Phe Ser Gly Glu
      35             40             45
Glu Thr Leu Arg Gly Asp Ser Gly Tyr Tyr Val Gln Asn Glu Trp Ala
      50             55             60
Leu Pro Phe Arg Lys Gln Gln Ile Thr Pro Tyr Val Gly Ile Asp Ile

```

```

65          70          75          80
Gly His Val Trp Gly Pro Ser Thr Glu Thr Gln Leu Gly Asn Thr Leu
          85          90          95
Ile Gly Gly Val Val Gly Val Arg Gly Met Val Gly Asp Asp Val Asn
          100          105          110
Tyr Asp Val Ser Leu Gly Thr Pro Ile Lys Lys Pro Glu Gly Phe Asp
          115          120          125
Thr Asp Thr Arg
          130

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<210> 2569
 <211> 330
 <212> DNA
 <213> Homo sapiens

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<400> 2569
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tacctcgctcg ccgatagagt tgtcgtgacc accaagcaca acgatgacga gcagtacgtg
120
tgggagtgccc aagcggggcgg gtcgttcact gttactcgtg acacgtcagg ggagcagctt
180
ggcagggggca ctaagatcac actgttcctc aaggacgac agctggagta ccttgaggag
240
cgtcgcctca aggatctggt caagaagcac tctgagttca tcagctaccc catctccctg
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330

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<210> 2570
 <211> 110
 <212> PRT
 <213> Homo sapiens

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<400> 2570
Leu Ala Ala Gly Ala Asp Val Ser Met Ile Gly Gln Phe Gly Val Gly
1          5          10          15
Phe Tyr Ser Ala Tyr Leu Val Ala Asp Arg Val Val Val Thr Thr Lys
          20          25          30
His Asn Asp Asp Glu Gln Tyr Val Trp Glu Ser Gln Ala Gly Gly Ser
          35          40          45
Phe Thr Val Thr Arg Asp Thr Ser Gly Glu Gln Leu Gly Arg Gly Thr
          50          55          60
Lys Ile Thr Leu Phe Leu Lys Asp Asp Gln Leu Glu Tyr Leu Glu Glu
65          70          75          80
Arg Arg Leu Lys Asp Leu Val Lys Lys His Ser Glu Phe Ile Ser Tyr
          85          90          95
Pro Ile Ser Leu Trp Thr Glu Lys Thr Thr Glu Lys Glu Ile
          100          105          110

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<210> 2571
 <211> 335
 <212> DNA
 <213> Homo sapiens

<400> 2571
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120
aaatgggatg tccgttttagg gcaggggaacg acagctatcg accaggtgga gaagcagcgt
180
gaagatgggt cttcctactt cgaaaccacc attacatttg aagacggcag cactgttacc
240
ggtgacgcat tcctagttgc taccgagcgt acccctaaca ccgaccgcct tggcctcgac
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335

<210> 2572
<211> 111
<212> PRT
<213> Homo sapiens

<400> 2572
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1 5 10 15
Gly Arg Ser Pro Val Leu Leu Lys His Leu Asp Asn Glu Leu Ser Glu
20 25 30
Leu Phe Thr Glu Ile Ala Arg Glu Lys Trp Asp Val Arg Leu Gly Gln
35 40 45
Gly Thr Thr Ala Ile Asp Gln Val Glu Lys Gln Arg Glu Asp Gly Ser
50 55 60
Ser Tyr Phe Glu Thr Thr Ile Thr Phe Glu Asp Gly Ser Thr Val Thr
65 70 75 80
Gly Asp Ala Phe Leu Val Ala Thr Gly Arg Thr Pro Asn Thr Asp Arg
85 90 95
Leu Gly Leu Asp Asn Gly Ser Gly Val Lys Val Glu Arg Gly Arg
100 105 110

<210> 2573
<211> 460
<212> DNA
<213> Homo sapiens

<400> 2573
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240
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300
cgatcccacc agaacggagg agatgaaggt gagggcattg tgtgagggga ggatcgcggc
360

cactgaccac gccagtaccg gcaggggtcag gatcagcccg acgagaccgg aagtgatgcg
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 460

<210> 2574
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2574
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 1 5 10 15
 Asp Arg Phe Val Arg Val Val Gly His Arg Arg His Arg Arg Cys Arg
 20 25 30
 Asp Asp Val Asp Thr Ser Thr Gly Ala Val Arg Asp Pro Arg Arg Arg
 35 40 45
 Arg Arg Cys Arg His Trp His Asp Glu Gly His His Arg Glu Glu Asn
 50 55 60
 Gly His His Ser Gln Thr Thr Ser Ser Gln Lys Ser Glu Asp Glu Gly
 65 70 75 80
 Asp Asp Gly Asp Asp Gln Ser Arg Tyr Ser Gln Arg Ser His Gln Asn
 85 90 95
 Gly Gly Asp Glu Gly Glu Gly Ile Val
 100 105

<210> 2575
 <211> 3954
 <212> DNA
 <213> Homo sapiens

<400> 2575
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3954

<210> 2576

<211> 1016

<212> PRT

<213> Homo sapiens

<400> 2576

Met	Ala	Pro	Arg	Thr	Leu	Trp	Ser	Cys	Tyr	Leu	Cys	Cys	Leu	Leu	Thr
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Ala	Ala	Ala	Gly	Ala	Ala	Ser	Tyr	Pro	Pro	Arg	Gly	Phe	Ser	Leu	Tyr
			20					25					30		
Thr	Gly	Ser	Ser	Gly	Ala	Leu	Ser	Pro	Gly	Gly	Pro	Gln	Ala	Gln	Ile
		35					40					45			
Ala	Pro	Arg	Pro	Ala	Ser	Arg	His	Arg	Asn	Trp	Cys	Ala	Tyr	Val	Val
	50					55					60				
Thr	Arg	Thr	Val	Ser	Cys	Val	Leu	Glu	Asp	Gly	Val	Glu	Thr	Tyr	Val
65					70					75				80	
Lys	Tyr	Gln	Pro	Cys	Ala	Trp	Gly	Gln	Pro	Gln	Cys	Pro	Gln	Ser	Ile
				85				90						95	
Met	Tyr	Arg	Arg	Phe	Leu	Arg	Pro	Arg	Tyr	Arg	Val	Ala	Tyr	Lys	Thr
			100					105					110		
Val	Thr	Asp	Met	Glu	Trp	Arg	Cys	Cys	Gln	Gly	Tyr	Gly	Gly	Asp	Asp
		115					120					125			
Cys	Ala	Glu	Ser	Pro	Ala	Pro	Ala	Leu	Gly	Pro	Ala	Ser	Ser	Thr	Pro
	130					135					140				
Arg	Pro	Leu	Ala	Arg	Pro	Ala	Arg	Pro	Asn	Leu	Ser	Gly	Ser	Ser	Ala
145					150					155					160
Gly	Ser	Pro	Leu	Ser	Gly	Leu	Gly	Gly	Glu	Gly	Pro	Gly	Glu	Ser	Glu
				165				170						175	
Lys	Val	Gln	Gln	Leu	Glu	Glu	Gln	Val	Gln	Ser	Leu	Thr	Lys	Glu	Leu
			180					185					190		
Gln	Gly	Leu	Arg	Gly	Val	Leu	Gln	Gly	Leu	Ser	Gly	Arg	Leu	Ala	Glu
		195					200					205			
Asp	Val	Gln	Arg	Ala	Val	Glu	Thr	Ala	Phe	Asn	Gly	Arg	Gln	Gln	Pro
	210					215					220				
Ala	Asp	Ala	Ala	Ala	Arg	Pro	Gly	Val	His	Glu	Thr	Leu	Asn	Glu	Ile
225					230					235					240
Gln	His	Gln	Leu	Gln	Leu	Leu	Asp	Thr	Arg	Val	Ser	Thr	His	Asp	Gln
			245					250						255	
Glu	Leu	Gly	His	Leu	Asn	Asn	His	His	Gly	Gly	Ser	Ser	Ser	Ser	Gly
			260					265					270		
Gly	Ser	Arg	Ala	Pro	Ala	Pro	Ala	Ser	Ala	Pro	Pro	Gly	Pro	Ser	Glu
		275					280					285			
Glu	Leu	Leu	Arg	Gln	Leu	Glu	Gln	Arg	Leu	Gln	Glu	Ser	Cys	Ser	Val
	290					295					300				
Cys	Leu	Ala	Gly	Leu	Asp	Gly	Phe	Arg	Arg	Gln	Gln	Gln	Glu	Asp	Arg
305					310					315					320
Glu	Arg	Leu	Arg	Ala	Met	Glu	Lys	Leu	Leu	Ala	Ser	Val	Glu	Glu	Arg
			325					330						335	
Gln	Arg	His	Leu	Ala	Gly	Leu	Ala	Val	Gly	Arg	Arg	Pro	Pro	Gln	Glu
			340					345						350	
Cys	Cys	Ser	Pro	Glu	Leu	Gly	Arg	Arg	Leu	Ala	Glu	Leu	Glu	Arg	Arg

355	360	365
Leu Asp Val Val Ala Gly Ser Val Thr Val	Leu Ser Gly Arg Arg Gly	
370	375	380
Thr Glu Leu Gly Gly Ala Ala Gly Gln Gly	Gly His Pro Pro Gly Tyr	
385	390	395
Thr Ser Leu Ala Ser Arg Leu Ser Arg Leu	Glu Asp Arg Phe Asn Ser	400
405	410	415
Thr Leu Gly Pro Ser Glu Glu Gln Glu Glu	Ser Trp Pro Gly Ala Pro	
420	425	430
Gly Gly Leu Ser His Trp Leu Pro Ala Ala	Arg Gly Arg Leu Glu Gln	
435	440	445
Leu Gly Gly Leu Leu Ala Asn Val Ser Gly	Glu Leu Gly Gly Arg Leu	
450	455	460
Asp Leu Leu Glu Glu Gln Val Ala Gly Ala	Met Gln Ala Cys Gly Gln	
465	470	475
Leu Cys Ser Gly Ala Pro Gly Glu Gln Asp	Ser Gln Val Ser Glu Ile	480
485	490	495
Leu Ser Ala Leu Glu Arg Arg Val Leu Asp	Ser Glu Gly Gln Leu Arg	
500	505	510
Leu Val Gly Ser Gly Leu His Thr Val Glu	Ala Ala Gly Glu Ala Arg	
515	520	525
Gln Ala Thr Leu Glu Gly Leu Gln Glu Val	Val Gly Arg Leu Gln Asp	
530	535	540
Arg Val Asp Ala Gln Asp Glu Thr Ala Ala	Glu Phe Thr Leu Arg Leu	
545	550	555
Asn Leu Thr Ala Ala Arg Leu Gly Gln Leu	Glu Gly Leu Leu Gln Ala	
565	570	575
His Gly Asp Glu Gly Cys Gly Ala Cys Gly	Gly Val Gln Glu Glu Leu	
580	585	590
Gly Arg Leu Arg Asp Gly Val Glu Arg Cys	Ser Cys Pro Leu Leu Pro	
595	600	605
Pro Arg Gly Pro Gly Ala Gly Pro Gly Val	Gly Gly Pro Ser Arg Gly	
610	615	620
Pro Leu Asp Gly Phe Ser Val Phe Gly Gly	Ser Ser Gly Ser Ala Leu	
625	630	635
Gln Ala Leu Gln Gly Glu Leu Ser Glu Val	Ile Leu Ser Phe Ser Ser	640
645	650	655
Leu Asn Asp Ser Leu Asn Glu Leu Gln Thr	Thr Val Glu Gly Gln Gly	
660	665	670
Ala Asp Leu Ala Asp Leu Gly Ala Thr Lys	Asp Arg Ile Ile Ser Glu	
675	680	685
Ile Asn Arg Leu Gln Gln Glu Ala Thr Glu	His Ala Thr Glu Ser Glu	
690	695	700
Glu Arg Phe Arg Gly Leu Glu Glu Gly Gln	Ala Gln Ala Gly Gln Cys	
705	710	715
Pro Ser Leu Glu Gly Arg Leu Gly Arg Leu	Glu Gly Val Cys Glu Arg	
725	730	735
Leu Asp Thr Val Ala Gly Gly Leu Gln Gly	Leu Arg Glu Gly Leu Ser	
740	745	750
Arg His Val Ala Gly Leu Trp Ala Gly Leu	Arg Glu Thr Asn Thr Thr	
755	760	765
Ser Gln Met Gln Ala Ala Leu Leu Glu Lys	Leu Val Gly Gly Gln Ala	
770	775	780
Gly Leu Gly Arg Arg Leu Gly Ala Leu Asn	Ser Ser Leu Gln Leu Leu	

785		790		795		800
Glu Asp Arg Leu His Gln Leu Ser Leu Lys Asp Leu Thr Gly Pro Ala						
	805		810		815	
Gly Glu Ala Gly Pro Pro Gly Pro Pro Gly Leu Gln Gly Pro Pro Gly						
	820		825		830	
Pro Ala Gly Pro Pro Gly Ser Pro Gly Lys Asp Gly Gln Glu Gly Pro						
	835		840		845	
Ile Gly Pro Pro Gly Pro Gln Gly Glu Gln Gly Val Glu Gly Ala Pro						
	850		855		860	
Ala Ala Pro Val Pro Gln Val Ala Phe Ser Ala Ala Leu Ser Leu Pro						
	865		870		875	880
Arg Ser Glu Pro Gly Thr Val Pro Phe Asp Arg Val Leu Leu Asn Asp						
	885		890		895	
Gly Gly Tyr Tyr Asp Pro Glu Thr Gly Val Phe Thr Ala Pro Leu Ala						
	900		905		910	
Gly Arg Tyr Leu Leu Ser Ala Val Leu Thr Gly His Arg His Glu Lys						
	915		920		925	
Val Glu Ala Val Leu Ser Arg Ser Asn Gln Gly Val Ala Arg Val Asp						
	930		935		940	
Ser Gly Gly Tyr Glu Pro Glu Gly Leu Glu Asn Lys Pro Val Ala Glu						
	945		950		955	960
Ser Gln Pro Ser Pro Gly Thr Leu Gly Val Phe Ser Leu Ile Leu Pro						
	965		970		975	
Leu Gln Ala Gly Asp Thr Val Cys Val Asp Leu Val Met Gly Gln Leu						
	980		985		990	
Ala His Ser Glu Glu Pro Leu Thr Ile Phe Ser Gly Ala Leu Leu Tyr						
	995		1000		1005	
Gly Asp Pro Glu Leu Glu His Ala						
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<210> 2577

<211> 343

<212> DNA

<213> Homo sapiens

<400> 2577

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ggggcggtgt gcattcatcc ccggccgcag ctgatctgga gccatctgta gcgaaatgt
120

tgctgagcaa attacgaggg tcaacaggag cagggcagac gcttctccca cctgctggcc
180

agtgttcctt cggctaccgt gcaactcagcc ccacagtgc ccctgagtgg ataccggccc
240

tgctgtccct gggctctcaa tgggggctcg gggcctcaca gggccagcac gagccacttg
300

ccagggtctc caacagaccc tgagcctggc agtccttggg ccc
343

<210> 2578

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2578

Met Ala Ser Trp Ala Ser Arg Arg Ser Trp Gly Trp Gly Gly Gly Val
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 Val His Ser Ser Pro Ala Ala Ala Asp Leu Glu Pro Ser Val Ala Lys
 20 25 30
 Cys Leu Leu Ser Lys Leu Arg Gly Ser Thr Gly Ala Gly Gln Thr Leu
 35 40 45
 Leu Pro Pro Ala Gly Gln Cys Ser Leu Gly Tyr Arg Ala Leu Ser Pro
 50 55 60
 Thr Val Thr Pro Glu Trp Ile Pro Ala Leu Pro Ala Leu Gly Ser Gln
 65 70 75 80
 Trp Gly Leu Gly Ala Ser Gln Gly Gln His Glu Pro Leu Ala Arg Val
 85 90 95
 Ser Asn Arg Pro
 100

<210> 2579

<211> 420

<212> DNA

<213> Homo sapiens

<400> 2579

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 120
 gttaaaaaag agatgatact tgccaaacgt ttttctctta tagtatttac tgatgcatta
 180
 tgctggatac ccatttttgt agtgaaattt ctttctactgc ttcaggtaga aataccaggt
 240
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 300
 ctctatactc tgaccacaag accatttaaa gaaatgattc atcggttttg gtataactac
 360
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 420

<210> 2580

<211> 140

<212> PRT

<213> Homo sapiens

<400> 2580

Xaa Met Ile Phe Arg Ser Cys Ile Asn Leu Ala Ala Phe Ile Ile Ile
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 Val Phe Ser Tyr Gly Ser Met Phe Tyr Ser Val His Gln Ser Ala Ile
 20 25 30
 Thr Ala Thr Glu Ile Arg Asn Gln Val Lys Lys Glu Met Ile Leu Ala
 35 40 45
 Lys Arg Phe Phe Phe Ile Val Phe Thr Asp Ala Leu Cys Trp Ile Pro
 50 55 60
 Ile Phe Val Val Lys Phe Leu Ser Leu Leu Gln Val Glu Ile Pro Gly
 65 70 75 80
 Thr Ile Thr Ser Trp Val Val Ile Phe Ile Leu Pro Ile Asn Ser Ala

130 135 140
 Glu Lys Thr Tyr Val His Arg Ile Gly
 145 150

<210> 2583
 <211> 7098
 <212> DNA
 <213> Homo sapiens

<400> 2583
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 120
 ctcatcatcc tttcaaactt gtggtggaac agggttttct tccctgtctg tgtattttga
 180
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<212> PRT

<213> Homo sapiens

<400> 2584

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<213> Homo sapiens

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Thr Pro Ser Ser Gln Ile Val Gly Thr Gln Ala Val Phe Asn Val Leu
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Met Gly Asn Gly Ser Tyr Lys Asn Leu Thr Ala Glu Phe Ala Asp Leu
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Asp Pro Thr Ala Gly Asp Pro Val Glu Gln Ile Arg Ala Leu Thr Arg
      20           25           30
Gly Arg Gly Val Asp Phe Ala Ile Glu Val Val Gly Ile Val Glu Val
      35           40           45
Met Glu Gln Ala Tyr Trp Ala Ala Arg Arg Gly Gly Thr Ile Val Tyr

```

```

      50              55              60
Val Gly Ala Leu Gly Ile Asp Ala Lys Leu Val Leu Pro Ala Asn Asp
65              70              75              80
Leu His Gly Gly Ala Lys Thr Ile Ile Gly Cys Ala Asn Gly Leu Gly
      85              90              95
Ala Val Arg Thr Asp Tyr Ala Lys Met Ile Ser Leu Val Glu Thr Gly
      100             105             110
Arg Leu Asp Leu Gly Gly Met Ile Thr Arg
      115             120

```

<210> 2591
 <211> 341
 <212> DNA
 <213> Homo sapiens

```

<400> 2591
acgcgtaaag gcatgacctc accttatcat cagggtcaca cgtgtgttat tctggggctg
60
agcagcccac gagttgtcca gcaccaggcc aggggtcagt cagcaatgag gacagctcct
120
tctgtctcca gggcaggccc tgggcagggc aatgctgggg acacggtggg gaggtaggcca
180
cagcttctgt gggggagttc ctatggcagg aggatcatgc ccagcagcgt ggaagagcaa
240
ggggtgaccc tgcactcgag gctcctggga agacggggag gggtgagggt acatgaggga
300
gaggggtcag ttggtgcatt cacagaacag cagggtggcc a
341

```

<210> 2592
 <211> 109
 <212> PRT
 <213> Homo sapiens

```

<400> 2592
Met Thr Ser Pro Tyr His Gln Gly His Thr Cys Val Ile Leu Gly Leu
1      5      10      15
Ser Ser Pro Arg Val Val Gln His Gln Ala Arg Gly Gln Ser Ala Met
      20      25      30
Arg Thr Ala Pro Ser Cys Ser Arg Ala Gly Pro Gly Gln Gly Asn Ala
      35      40      45
Gly Asp Thr Val Gly Ser Arg Pro Gln Leu Leu Trp Gly Ser Ser Tyr
      50      55      60
Gly Arg Arg Ile Met Pro Ser Ser Val Glu Glu Gln Gly Val Thr Leu
65      70      75      80
His Ser Arg Leu Leu Gly Arg Arg Gly Gly Leu Arg Leu His Glu Gly
      85      90      95
Glu Gly Ser Val Gly Ala Phe Thr Glu Gln Gln Gly Gly
      100     105

```

<210> 2593
 <211> 501
 <212> DNA
 <213> Homo sapiens

<400> 2593

cgcgtaaggc caccagaaga tttttatgca cagattccgt tgcttcgaga gctaatttcg
 60
 gcgctttcat ggggttttat ggaggtggat gaatatgagg cggaatgat ttcggtacc
 120
 ttggcgcgcc aagcggatga agcgggggat tatatgactt atattgtgtc ttcggacctc
 180
 gatatgctgc aaatcgtaga tgaaaacacc aagatgtatc gaattctgcg gggattttcg
 240
 gatctcgagg agatggatac tccagcgatt gaagaaaaat atggaatctt gaagtcgcaa
 300
 tttttggacc tgaaggcgct gaagggggat aattcggata atattccagg cgtaccaggg
 360
 attggtgaga aaaccgcagt gaaactcttg aatgagtatg gtagcttgga ggggatttat
 420
 aatcatatca aggaaatttc gggggcgaca cagaagaaat tgattgctgg acgcgaatca
 480
 gctgagatgt ctcttaagct t
 501

<210> 2594

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2594

Arg	Val	Arg	Pro	Pro	Glu	Asp	Phe	Tyr	Ala	Gln	Ile	Pro	Leu	Leu	Arg
1				5					10				15		
Glu	Leu	Ile	Ser	Ala	Leu	Ser	Trp	Gly	Phe	Met	Glu	Val	Asp	Glu	Tyr
			20					25					30		
Glu	Ala	Asp	Asp	Ile	Ile	Gly	Thr	Leu	Ala	Arg	Gln	Ala	Asp	Glu	Ala
		35				40					45				
Gly	Asp	Tyr	Met	Thr	Tyr	Ile	Val	Ser	Ser	Asp	Leu	Asp	Met	Leu	Gln
	50					55				60					
Ile	Val	Asp	Glu	Asn	Thr	Lys	Met	Tyr	Arg	Ile	Leu	Arg	Gly	Phe	Ser
65				70				75					80		
Asp	Leu	Glu	Glu	Met	Asp	Thr	Pro	Ala	Ile	Glu	Glu	Lys	Tyr	Gly	Ile
			85					90					95		
Leu	Lys	Ser	Gln	Phe	Leu	Asp	Leu	Lys	Ala	Leu	Lys	Gly	Asp	Asn	Ser
			100					105					110		
Asp	Asn	Ile	Pro	Gly	Val	Pro	Gly	Ile	Gly	Glu	Lys	Thr	Ala	Val	Lys
			115				120					125			
Leu	Leu	Asn	Glu	Tyr	Gly	Ser	Leu	Glu	Gly	Ile	Tyr	Asn	His	Ile	Lys
		130				135					140				
Glu	Ile	Ser	Gly	Ala	Thr	Gln	Lys	Lys	Leu	Ile	Ala	Gly	Arg	Glu	Ser
145					150				155					160	
Ala	Glu	Met	Ser	Leu	Lys	Leu									
															165

<210> 2595

<211> 928

<212> DNA

<213> Homo sapiens

<400> 2595

agatcttcca gatgcaacaa tgatcaatta agacacgcgg cgacatgggtg gccctgcct
 60
 cccccccag ggatacctgt aatacctgct tcccacttca tgggctacaa tctcatgctg
 120
 gtcacaattt ctggggctca ctcatataac accaacaacaa gggatatttg tgaagaactt
 180
 cgctgcggg agcttgaaga agtcaaggcc agagctgctc agatggaaaa gaccatgcgg
 240
 tgggtggcgg actgcactgc caactggaga gaaaaatgga gtaaagttcg agctgaaagg
 300
 aacagtgccg gaaaggaagg aagacaactc agaataaaac tagagatggc gatgaaagaa
 360
 tcggatccac tgaacagaa acagagtttg ccacttcaga aggaggcatt agaagcta
 420
 gttaccagg atctgaagct tcttggttc gtagaagaat cctgtgaaca tacagacaa
 480
 tttcaattga gttcacaat gcatagtct atcagagagt atttggtaaa aagacaattt
 540
 tctacaaagg aggacacaaa taataaggaa caagggtggtg ttattgattc tctaaaatta
 600
 agtgaggaga tgaagccaa tctagatggt gttgatttat tcaacaatgg tggttctgga
 660
 aacggtgaaa cgaaaactgg gctgagactg aaagcaataa atctgccttt ggaaaatgaa
 720
 gtaactgaaa tttcagcttt gcagggtgat ttggatgaat tccaaaaaat cttatggaag
 780
 gaaaagagaaa tgcgcacagc tttggaaaaa gaaatagaga gactggagtc ggctttgtct
 840
 ctgtggaagt ggaagtatga agaactgaaa gaatcaaagc caaaaaatgt gaaagagttt
 900
 gacattcttc ttggtcaaca taatgatg
 928

<210> 2596

<211> 309

<212> PRT

<213> Homo sapiens

<400> 2596

Arg Ser Ser Arg Cys Asn Asn Asp Gln Leu Arg His Ala Ala Thr Trp
 1 5 10 15
 Trp Pro Leu Pro His Pro Pro Gly Ile Pro Val Ile Pro Ala Ser His
 20 25 30
 Phe Met Gly Tyr Asn Leu Met Leu Val Thr Ile Ser Gly Ala His Ser
 35 40 45
 Tyr Asn Thr Asn Lys Trp Asp Ile Cys Glu Glu Leu Arg Leu Arg Glu
 50 55 60
 Leu Glu Glu Val Lys Ala Arg Ala Ala Gln Met Glu Lys Thr Met Arg
 65 70 75 80
 Trp Trp Ser Asp Cys Thr Ala Asn Trp Arg Glu Lys Trp Ser Lys Val
 85 90 95
 Arg Ala Glu Arg Asn Ser Ala Gly Lys Glu Gly Arg Gln Leu Arg Ile

100 105 110
 Lys Leu Glu Met Ala Met Lys Glu Ser Asp Pro Leu Lys Gln Lys Gln
 115 120 125
 Ser Leu Pro Leu Gln Lys Glu Ala Leu Glu Ala Asn Val Thr Gln Asp
 130 135 140
 Leu Lys Leu Pro Gly Phe Val Glu Glu Ser Cys Glu His Thr Asp Gln
 145 150 155 160
 Phe Gln Leu Ser Ser Gln Met His Glu Ser Ile Arg Glu Tyr Leu Val
 165 170 175
 Lys Arg Gln Phe Ser Thr Lys Glu Asp Thr Asn Asn Lys Glu Gln Gly
 180 185 190
 Val Val Ile Asp Ser Leu Lys Leu Ser Glu Glu Met Lys Pro Asn Leu
 195 200 205
 Asp Gly Val Asp Leu Phe Asn Asn Gly Gly Ser Gly Asn Gly Glu Thr
 210 215 220
 Lys Thr Gly Leu Arg Leu Lys Ala Ile Asn Leu Pro Leu Glu Asn Glu
 225 230 235 240
 Val Thr Glu Ile Ser Ala Leu Gln Val His Leu Asp Glu Phe Gln Lys
 245 250 255
 Ile Leu Trp Lys Glu Arg Glu Met Arg Thr Ala Leu Glu Lys Glu Ile
 260 265 270
 Glu Arg Leu Glu Ser Ala Leu Ser Leu Trp Lys Trp Lys Tyr Glu Glu
 275 280 285
 Leu Lys Glu Ser Lys Pro Lys Asn Val Lys Glu Phe Asp Ile Leu Leu
 290 295 300
 Gly Gln His Asn Asp
 305

<210> 2597

<211> 631

<212> DNA

<213> Homo sapiens

<400> 2597

ccatgggtgg gaatgcaaga gacacactct agacttacta gaggagcaag agcaggactt
 60
 ggctgcacct gcagctgagg gtttagcagga attaggagat aacagtagaa tagggctaga
 120
 ctgaaaaggc ctttgatgcc aggttaggaa atttacattt tatccacaaa atccaaatcc
 180
 tcctttaata atgagatgtc tttaacaagt tttgggcaag agtggtatgg ctgacctggt
 240
 gtcctgggaa ggaactgtgt ggggatggtg tgcaggactt acctagggtg ggaaaggcac
 300
 aagcagcatg gggctgtggc agctaccaga ggtaaaggga catttcaggg aaagacttgg
 360
 caggacaaga ccttccttgg atggatggat gaataccaga aacagggacc caagagaaag
 420
 gccgagtttc atagggagag aagatgggtc atgtatgagg catgttgagc ttgtactgat
 480
 ggtgagacgt ccagtcgaca gtactaccca ctggccagtg agaaatgtgg gaccaggggt
 540
 caggaggaaa ctggggccgg aaatgagcat ttggaaggcg ccagggtgga agcgggtggt
 600

tcactccacg agtgctatatt cacttacgcg t
631

<210> 2598

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2598

Met Gly Leu Trp Gln Leu Pro Glu Val Lys Gly His Phe Arg Glu Arg
1 5 10 15
Leu Gly Arg Thr Arg Pro Ser Leu Asp Gly Trp Met Asn Thr Arg Asn
20 25 30
Arg Asp Pro Arg Glu Arg Pro Ser Phe Ile Gly Arg Glu Asp Gly Ser
35 40 45
Cys Met Arg His Val Glu Leu Val Leu Met Val Arg Arg Pro Val Asp
50 55 60
Ser Thr Thr His Trp Pro Val Arg Asn Val Gly Pro Gly Phe Arg Arg
65 70 75 80
Lys Leu Gly Pro Glu Met Ser Ile Trp Lys Ala Pro Gly Trp Lys Arg
85 90 95
Val Val His Ser Thr Ser Ala Ile Ser Leu Thr Arg
100 105

<210> 2599

<211> 356

<212> DNA

<213> Homo sapiens

<400> 2599

nagatcttat acagggacgt gatgttggag aactactgga accttggttc tctgggactg
60
tgtcattttg atatgaatat tatctccatg ttggaggaag ggaaagagcc ctggactgtg
120
aagagctgtg tgaaaatagc aagaaaacca agaacgcggg aatgtgtcaa aggcgtggtc
180
acagatatcc ctctaaatg tacaatcaag gatttgctac caaaagagaa gagcagtaca
240
gaagcagtat tccacacagt ggtgttggaa agacacgaaa gccctgacat tgaagacttt
300
tccttcaagg aaccccagaa aaatgtgcat gattttgagt gtcaatggag agatgn
356

<210> 2600

<211> 118

<212> PRT

<213> Homo sapiens

<400> 2600

Xaa Ile Leu Tyr Arg Asp Val Met Leu Glu Asn Tyr Trp Asn Leu Val
1 5 10 15
Ser Leu Gly Leu Cys His Phe Asp Met Asn Ile Ile Ser Met Leu Glu
20 25 30
Glu Gly Lys Glu Pro Trp Thr Val Lys Ser Cys Val Lys Ile Ala Arg

```

      35          40          45
Lys Pro Arg Thr Arg Glu Cys Val Lys Gly Val Val Thr Asp Ile Pro
  50          55          60
Pro Lys Cys Thr Ile Lys Asp Leu Leu Pro Lys Glu Lys Ser Ser Thr
  65          70          75          80
Glu Ala Val Phe His Thr Val Val Leu Glu Arg His Glu Ser Pro Asp
      85          90          95
Ile Glu Asp Phe Ser Phe Lys Glu Pro Gln Lys Asn Val His Asp Phe
      100          105          110
Glu Cys Gln Trp Arg Asp
      115

```

<210> 2601
 <211> 329
 <212> DNA
 <213> Homo sapiens

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<400> 2601
gcgccgatca tgatctacgg cgacgacgtc acccacctgc tcaccgaaga aggcacgcgc
  60
tacttggtaca aggcgcgttc cctggaagag cgccaagcga tgatcgccgg cggtggtggg
  120
gtcaccgcct tcggcttgcg ccacaacccc aaggacactg cgcgcatgcg ccgcgaaggc
  180
ttgatgcct tgcccgaaga cctcggtatc cgccgcaccg acgccaccgc cgaactgttg
  240
gccgccgaaga gcgtggccga cctggtggag tggtcggtg gcttgtgcaa cccgcccgcc
  300
aagttcagga gctggtaaat gcgcgcctt
  329

```

<210> 2602
 <211> 105
 <212> PRT
 <213> Homo sapiens

```

<400> 2602
Ala Pro Ile Met Ile Tyr Gly Asp Asp Val Thr His Leu Leu Thr Glu
  1          5          10          15
Glu Gly Ile Ala Tyr Leu Tyr Lys Ala Arg Ser Leu Glu Glu Arg Gln
      20          25          30
Ala Met Ile Ala Gly Gly Gly Gly Val Thr Ala Phe Gly Leu Arg His
      35          40          45
Asn Pro Lys Asp Thr Ala Arg Met Arg Arg Glu Gly Leu Ile Ala Leu
      50          55          60
Pro Glu Asp Leu Gly Ile Arg Arg Thr Asp Ala Thr Arg Glu Leu Leu
      65          70          75          80
Ala Ala Lys Ser Val Ala Asp Leu Val Glu Trp Ser Gly Gly Leu Cys
      85          90          95
Asn Pro Pro Ala Lys Phe Arg Ser Trp
      100          105

```

<210> 2603
 <211> 423

<212> DNA

<213> Homo sapiens

<400> 2603

tcatgatcca ttgctctacc ctttacgggt gtgcacctac gcccagggtcg gtggtcagga
 60
 gcatcgggttc ggtggtaccg aggtcgagga cttccttcac gccgttggtc ggggagggca
 120
 gggtgtggta agtggtcagg tgggccacga tctgggcact gatcacctcg gtgaaatcga
 180
 agctctgggt accctgagcg gtcgccgaca cgacacggtc cacaccggag accagaccga
 240
 tctcggagat gatcgcgtaa ccttcattgt cgtagaggat cttgcacgca tcgatgatgc
 300
 gcttgatctc cttggcagtg aagatgattt ccatcggggg gttggccgac agatactgac
 360
 cggagctggg ggtcacctgg gtggaatcca ggtcatccgg aaccgggttc aggttgtccg
 420
 cgg
 423

<210> 2604

<211> 103

<212> PRT

<213> Homo sapiens

<400> 2604

Met	Glu	Ile	Ile	Phe	Thr	Ala	Lys	Glu	Ile	Lys	Arg	Ile	Ile	Asp	Ala
1				5					10					15	
Cys	Lys	Ile	Leu	Tyr	Asp	Asn	Glu	Gly	Tyr	Ala	Ile	Ile	Ser	Glu	Ile
			20					25					30		
Gly	Leu	Val	Ser	Gly	Val	Asp	Arg	Val	Val	Ser	Ala	Thr	Ala	Gln	Gly
		35					40				45				
Asn	Gln	Ser	Phe	Asp	Phe	Thr	Glu	Val	Ile	Ser	Ala	Gln	Ile	Val	Ala
	50					55				60					
His	Leu	Thr	Thr	Tyr	His	Asn	Leu	Pro	Ser	Ala	Asn	Asn	Gly	Val	Lys
65				70					75					80	
Glu	Val	Leu	Asp	Leu	Gly	Thr	Thr	Glu	Pro	Met	Leu	Leu	Thr	Thr	Asp
			85					90					95		
Leu	Gly	Val	Gly	Ala	Gln	Pro									
			100												

<210> 2605

<211> 354

<212> DNA

<213> Homo sapiens

<400> 2605

ngggagggag ggcattgtcaa aagcgactgt atccagaggg tttgatttaa acatttttca
 60
 aaacatatgt ggcaaacagc ggggggaggg gatctcacca acgtttttct ccatttcttc
 120
 tttgcatgct gggacctgtt ccattttcaa aatgtgtcat tttggaagga aaggaggaa
 180

caactacttg aaaggaatac acgtcagtat gagccctttc tcctcagcag aaggttgccc
 240
 caaagtacct cctctgaggc gagagaaagg agagaggagg agagacagct ttcacaaat
 300
 ggggcaccca ggactctagg gagagaggca cgttctcaca aaggcccttt gagc
 354

<210> 2606
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2606
 Met Ser Lys Ala Thr Val Ser Arg Gly Phe Asp Leu Asn Ile Phe Gln
 1 5 10 15
 Asn Ile Cys Gly Lys Gln Arg Gly Glu Gly Ile Ser Pro Thr Phe Phe
 20 25 30
 Ser Thr Ser Ser Leu His Ala Gly Thr Cys Ser Thr Phe Lys Met Cys
 35 40 45
 His Phe Gly Arg Lys Gly Arg Asn Asn Tyr Leu Lys Gly Ile His Val
 50 55 60
 Ser Met Ser Pro Phe Ser Ser Ala Glu Gly Cys Pro Lys Val Pro Pro
 65 70 75 80
 Leu Arg Arg Glu Lys Gly Glu Arg Arg Arg Asp Ser Phe His Gln Met
 85 90 95
 Gly His Pro Gly Leu
 100

<210> 2607
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 2607
 tgatcaagaa caatgatacg atatacctaac caacagagga agcaacggaa gttgttggtg
 60
 tttttatgct gttttttttt ttgagaacg gatcttgccc ctgccccag gccggaatgg
 120
 atgacatgga cagaaccccg tcggaaaaaa gccggaatgt gcaaaccxaa attcccacca
 180
 cacggggggc ctaacaattg gatccatccc cnaaaaaanc cntnncaaaa aaagntaaaa
 240
 actttttttt ttttaaannn anacccccaa aaaaaccxaa aaaaaaatt taaaaaa
 297

<210> 2608
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 2608
 Met Ile Arg Tyr Pro Asn Gln Gln Arg Lys Gln Arg Lys Leu Leu Leu
 1 5 10 15
 Phe Leu Cys Cys Phe Phe Phe Leu Arg Thr Asp Leu Ala Pro Ala Pro

```

      20      25      30
Arg Pro Glu Trp Met Thr Trp Thr Glu Pro Arg Arg Lys Lys Ala Gly
      35      40      45
Met Cys Lys Pro Lys Phe Pro Pro His Gly Gly Pro Asn Asn Trp Ile
      50      55      60
His Pro Xaa Lys Xaa Pro Xaa Gln Lys Lys Xaa Lys Thr Phe Phe Phe
65      70      75      80
Leu Xaa Xaa Xaa Pro Gln Lys Asn Gln Lys Lys Lys Phe Lys Lys
      85      90      95

```

<210> 2609

<211> 305

<212> DNA

<213> Homo sapiens

<400> 2609

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ncgccatcgg catgatgtca ggcaaagatg atcctggcat ggcaaaggta tacggttttg
60
ttgacacgtc cctgacgac cctatccgct catctggaga cccatgcgtt ccttggaccc
120
caattgccta cgaaaaaatt ttttttttcc cccccaaaaa acaccccccc ctcgcatctg
180
tgaaagtctt acctcggggg cgtcatctcg gctgtcatcg tcggcaaadc actcagctgg
240
ccgtaccctt cgtcatcgcc cgggccaccg acctcgacgg cncagcgtgc acggcaacga
300
ccacc
305

```

<210> 2610

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2610

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Met Met Ser Gly Lys Asp Asp Pro Gly Met Ala Lys Val Tyr Gly Phe
1      5      10      15
Val Asp Thr Ser Leu Thr Ile Pro Ile Arg Ser Ser Gly Asp Pro Cys
      20      25      30
Val Pro Trp Thr Pro Ile Ala Tyr Glu Lys Ile Phe Phe Phe Pro Pro
      35      40      45
Lys Lys His Pro Pro Leu Ala Ser Val Lys Val Leu Pro Arg Gly Arg
      50      55      60
His Leu Gly Cys His Arg Arg Gln Ile Thr Gln Leu Ala Val Pro Phe
65      70      75      80
Val Ile Ala Arg Ala Thr Asp Leu Asp Gly Xaa Ala Cys Thr Ala Thr
      85      90      95
Thr Thr

```

<210> 2611

<211> 342

<212> DNA

<213> Homo sapiens

<400> 2611

gccgccgcga tcgacggcga ctccctcgacc agctgggtgt ccagctcgct gcaaaccgct
60
gtggggcaat ggcttcaggt ggacttcgac catccggtga ccaacgcgac catcaccctg
120
acgcccagcg ccaccgctgt cggagctcag gtgcgccgcg tcgaggtggc aacagccaac
180
ggcaccagca caattcgctt cgaccagccc ggcaagccgc tgacggcggc gctgccctac
240
ggcgagacct catgggtccg gttcaccgcg accggcaccg acgacggctc ccccggcgtg
300
cagttcggca tcaccgactt ctccgtgacg cagtacgacg cg
342

<210> 2612

<211> 114

<212> PRT

<213> Homo sapiens

<400> 2612

Ala	Ala	Ala	Ile	Asp	Gly	Asp	Ser	Ser	Thr	Ser	Trp	Val	Ser	Ser	Ser
1			5						10				15		
Leu	Gln	Thr	Ala	Val	Gly	Gln	Trp	Leu	Gln	Val	Asp	Phe	Asp	His	Pro
			20					25					30		
Val	Thr	Asn	Ala	Thr	Ile	Thr	Leu	Thr	Pro	Ser	Ala	Thr	Ala	Val	Gly
			35				40					45			
Ala	Gln	Val	Arg	Arg	Val	Glu	Val	Ala	Thr	Ala	Asn	Gly	Thr	Ser	Thr
			50			55				60					
Ile	Arg	Phe	Asp	Gln	Pro	Gly	Lys	Pro	Leu	Thr	Ala	Ala	Leu	Pro	Tyr
65				70				75					80		
Gly	Glu	Thr	Ser	Trp	Val	Arg	Phe	Thr	Ala	Thr	Gly	Thr	Asp	Asp	Gly
			85					90					95		
Ser	Pro	Gly	Val	Gln	Phe	Gly	Ile	Thr	Asp	Phe	Ser	Val	Thr	Gln	Tyr
			100					105					110		

Asp Ala

<210> 2613

<211> 414

<212> DNA

<213> Homo sapiens

<400> 2613

acgcgtgtgg gttgtgcaca gggcatggct gctctggaca ggcctgggcc ctgggcatca
60
ttctcctcct ccaaaagggtg agggctctgac ctaatggtac tttgtctgat gttttccaga
120
tatgccccta ctgggaagggt ccaagtgggc aggcagagtc tggggtggag cgaggtgggg
180
ctgggaagca ctctgtcttt tctgtgtccc cagaacgaat gcaagttctg gcagcttctc
240
ctcctcctgg gaggaggaaa ggagggctcg cctccaggtc tcaggctgag ggagtgggct
300

ggagaccctc tagatggcca gcagaggctg gcctctgtga gaaggcttcc ttgcgtgact
 360
 ctggggccccc tcccagctc tcctcgtggc aggcagggac ttgggccagc atgg
 414

<210> 2614

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2614

Met	Val	Leu	Cys	Leu	Met	Phe	Ser	Arg	Tyr	Ala	Pro	Thr	Gly	Lys	Gly
1			5					10					15		
Gln	Val	Gly	Arg	Gln	Ser	Leu	Gly	Trp	Ser	Glu	Val	Gly	Leu	Gly	Ser
		20					25					30			
Thr	Pro	Ala	Phe	Leu	Leu	Pro	Gln	Asn	Glu	Cys	Lys	Phe	Trp	Gln	Leu
	35					40					45				
Leu	Leu	Leu	Leu	Gly	Gly	Gly	Lys	Glu	Gly	Ser	Pro	Pro	Gly	Leu	Arg
	50			55				60							
Leu	Arg	Glu	Trp	Ala	Gly	Asp	Pro	Leu	Asp	Gly	Gln	Gln	Arg	Leu	Ala
65				70				75					80		
Ser	Val	Arg	Arg	Leu	Pro	Cys	Val	Thr	Leu	Gly	Pro	Leu	Pro	Gly	Ser
			85					90					95		
Pro	Arg	Gly	Arg	Gln	Gly	Leu	Gly	Pro	Ala	Trp					
		100					105								

<210> 2615

<211> 394

<212> DNA

<213> Homo sapiens

<400> 2615

nnngccgccg cctcggccg cagcgcgctt cttttgcgcg ncgacgtcag ccagaaggcg
 60
 gacgtcgacg ccattgctgaa ggaaacgctg gccagttcg gccacatcga tatcctcgtc
 120
 aacaatgcgg gcgtcacgca tgcggccgat ttctcgacg tgtgcgaaga cgatttcgac
 180
 cgggtcatgc gcattaacct gaaatcgatg ttctgtgctg gccaggccgc ggcgcgcgag
 240
 atggtcaagc gcaacagcgg ctgcatcatc aacatgtcca gcgtgaatgc ggaactggcc
 300
 attccgaacc aggtgccgta cgtggtgtcg aaaggcgcca tcaaccagct gaccaaggtc
 360
 atggccttga acctggcgcc gcacggtgct cgct
 394

<210> 2616

<211> 131

<212> PRT

<213> Homo sapiens

<400> 2616

Xaa Ala Ala Ala Leu Gly Arg Ser Ala Leu Leu Leu Arg Xaa Asp Val

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      1           5           10           15
Ser Gln Lys Ala Asp Val Asp Ala Met Leu Lys Glu Thr Leu Ala Gln
      20           25           30
Phe Gly His Ile Asp Ile Leu Val Asn Asn Ala Gly Val Thr His Ala
      35           40           45
Ala Asp Phe Leu Asp Val Cys Glu Asp Asp Phe Asp Arg Val Met Arg
      50           55           60
Ile Asn Leu Lys Ser Met Phe Leu Cys Gly Gln Ala Ala Ala Arg Glu
      65           70           75           80
Met Val Lys Arg Asn Ser Gly Cys Ile Ile Asn Met Ser Ser Val Asn
      85           90           95
Ala Glu Leu Ala Ile Pro Asn Gln Val Pro Tyr Val Val Ser Lys Gly
      100          105          110
Ala Ile Asn Gln Leu Thr Lys Val Met Ala Leu Asn Leu Ala Pro His
      115          120          125
Gly Ala Arg
      130

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<210> 2617
 <211> 513
 <212> DNA
 <213> Homo sapiens

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<400> 2617
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120
gtcaccttgg gaaatcacia gattctcaat gacgtctccg tatcattcca agcgggagtt
180
atgcacgcca tacttgcccc caacggttct gggaagacca ccctggtacg cacgttatgc
240
ggagccctct cccccgagtc ggggagcgtc aaattcgatg gaacggatct atccacgatg
300
tccgcatcct gtatcgcgcg tcgtattgcg atcgtctggc agagcgcgac cgctccctct
360
gacctcaccg tacgtcacct cgttggctac gggagatatg cccacacacc gtggtggcag
420
ataagggaca ccagcgccga cagccatgtg gaacaagcaa tggagctggc cgatgtcacg
480
tgcttcgccg atcgacgcgt caccactctc tca
513

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<210> 2618
 <211> 171
 <212> PRT
 <213> Homo sapiens

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<400> 2618
Xaa Arg Leu Ala Ser Cys Ser Gln His Trp Gly Phe Pro Ser Phe Phe
1           5           10           15
Ser Ser Ser Glu Arg His Cys Glu Met Gly Asn Ile Met Glu Thr Pro
      20           25           30
Ile Leu Ser Gly Ser His Leu Asn Val Thr Leu Gly Asn His Lys Ile

```

```

      35              40              45
Leu Asn Asp Val Ser Val Ser Phe Gln Ala Gly Val Met His Ala Ile
  50              55              60
Leu Gly Pro Asn Gly Ser Gly Lys Thr Thr Leu Val Arg Thr Leu Cys
  65              70              75              80
Gly Ala Leu Ser Pro Glu Ser Gly Ser Val Lys Phe Asp Gly Thr Asp
      85              90              95
Leu Ser Thr Met Ser Ala Ser Cys Ile Ala Arg Arg Ile Ala Ile Val
      100              105              110
Trp Gln Ser Ala Thr Ala Pro Ser Asp Leu Thr Val Arg His Leu Val
      115              120              125
Gly Tyr Gly Arg Tyr Ala His Thr Pro Trp Trp Gln Ile Arg Asp Thr
      130              135              140
Ser Ala Asp Ser His Val Glu Gln Ala Met Glu Leu Ala Asp Val Thr
      145              150              155              160
Cys Phe Ala Asp Arg Arg Val Thr Thr Leu Ser
      165              170

```

<210> 2619
 <211> 348
 <212> DNA
 <213> Homo sapiens

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<400> 2619
nnaaatttcg acgaccttga ggttttcttc aagctgttgc cgcgttcggc anccggggaa
60
cggatgaacc cgtacaactc ggtgtggagc ggtgtgaccg acggtgacgg gccgcaggaa
120
cagcacgtca ttttcttga taacggtcgt accgacgtgc ttgccgacac ctttggtcgc
180
gaagtgttgc ggtgcatccg gtgtgcttcg tgtatcaata tctgcccggg ttacgagcgg
240
gcgggcggtc acccttacgg ctccggtgtac cccggggccga ttggtgcggg gctcaatccg
300
cagctgcggg gcgtggagca tcccgtcgat cgtggtctgc catacgcg
348

```

<210> 2620
 <211> 116
 <212> PRT
 <213> Homo sapiens

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<400> 2620
Xaa Asn Phe Asp Asp Leu Glu Val Phe Leu Lys Leu Leu Pro Arg Ser
  1              5              10              15
Ala Xaa Gly Glu Arg Met Asn Pro Tyr Asn Ser Val Trp Ser Gly Val
      20              25              30
Thr Asp Gly Asp Gly Pro Gln Glu His Val Ile Phe Leu Asp Asn
      35              40              45
Gly Arg Thr Asp Val Leu Ala Asp Thr Leu Gly Arg Glu Val Leu Arg
      50              55              60
Cys Ile Arg Cys Ala Ser Cys Ile Asn Ile Cys Pro Val Tyr Glu Arg
      65              70              75              80
Ala Gly Gly His Pro Tyr Gly Ser Val Tyr Pro Gly Pro Ile Gly Ala

```

	85		90		95										
Val	Leu	Asn	Pro	Gln	Leu	Arg	Gly	Val	Glu	His	Pro	Val	Asp	Arg	Gly
		100						105					110		
Leu	Pro	Tyr	Ala												
		115													

<210> 2621
 <211> 1485
 <212> DNA
 <213> Homo sapiens

<400> 2621
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 120
 ttttctttcc ctgttttgat ttgtctgaag ggagaggtgg tggtaggttag gatcagagct
 180
 ctccctggcat ccgtggggag gatttgctgg tggtaggttc gggctcatgc ccagacacac
 240
 tcaactgccc gtctgtccaa ggctccccct tcccccttgc tggtagggagg agctcgtgtg
 300
 ctccctggcc gcttactgga agggcgtttt tcagagctgc agggacaggg tgagcagctg
 360
 aagggttagg agggaagccg gcccccgctc tgcagaagct gcatttcagc tgaatctgtg
 420
 tttcagctc agttgggtgc accgttagcc cctctcctcc cggatgggtca tgtttttgtc
 480
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 540
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 600
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 660
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 720
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 780
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 900
 tggtaaaaat tcatctcttt cttaagccc atcaactccc aggacggttt gaggttactca
 960
 gttacctaa gcttctattc atccaaatca ttttctagag tcaactgtata agggctctatg
 1020
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 1080
 ttctgtacaa ccgtgtgtta tcacagtga gttttaagt taacngttga acttaggcat
 1140
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 1200
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 1260

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 1320
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 1380
 tttgtaaccg cgtaaacctg acaaaacctc agcagcagaa gtccctattt ttctaggagt
 1440
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 1485

<210> 2622

<211> 83

<212> PRT

<213> Homo sapiens

<400> 2622

Met	Phe	Ser	Phe	Pro	Val	Leu	Ile	Leu	Leu	Lys	Gly	Glu	Val	Val	Val
1				5				10					15		
Val	Arg	Ile	Arg	Ala	Leu	Leu	Ala	Ser	Val	Gly	Arg	Ile	Cys	Trp	Trp
			20				25					30			
Trp	Leu	Arg	Ala	His	Ala	Gln	Thr	His	Ser	Leu	Pro	Arg	Leu	Ser	Lys
			35				40					45			
Ala	Ser	Pro	Ser	Pro	Leu	Leu	Val	Gly	Gly	Ala	Arg	Val	Leu	Leu	Gly
	50					55					60				
Arg	Leu	Leu	Glu	Gly	Arg	Phe	Ser	Glu	Leu	Gln	Gly	Gln	Gly	Glu	Gln
65					70				75					80	
Leu	Lys	Gly													

<210> 2623

<211> 3524

<212> DNA

<213> Homo sapiens

<400> 2623

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 120
 agtgggttcc tgagtggcgc cggaggtacc ggcagtagcg gtggttagcgc ctccggcggc
 180
 ggtggtagtgc gcggcggcgc cggcggcggc agcagcggca ggagggcaga gatggaaccc
 240
 acctttcccc agggatatgt tatgttcaac caccgtcttc ccccggtcac cagcttcacc
 300
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 360
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 420
 gcggcgtagc ccgcggcctt cccctcgtag aggaacctct ggggggttctt gcagtctttg
 480
 gttagcatca aacaggagaa acccgggat cctgaggagc agcagtcca ccaccaccat
 540
 caccaccacc actatggggg gctgttcgct ggagctgaag agaggtctcc aggcctagga
 600

ggcgggtgaag ggggggagtc cggcgctc caggacctca gtattctcca ccagcatgtc
660
cagcagcaac cagcccagca ccaccgtgac gtattactca gcagcagtag caggactgat
720
gaccaccatg gactgagga gccaaagcag gacactaatg tcaaaaaggc aaaaaggcca
780
aagccagaat ctcaggaat caaagccaag aggaagccaa gtgcatcttc caaaccttct
840
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900
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1020
cagagacatg agaaaattca tagtagagag aagccatttg gatgtgatca gtgcagcatg
1080
aagtttattc agaagtacca tatggagaga cacaagagga cacatagtgg agaaaagcca
1140
tataagtgtg acacttgcca acagtatttt tcaaggactg atagattgtt gaagcacagg
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1320
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1980
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2220

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 2460
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 2580
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 2640
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 2700
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 2760
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 2820
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 2880
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 2940
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 3180
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 3240
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 3300
 ctgggctgat agacatttcg tcatttaagt aagggatcga agacatttca aattgctatc
 3360
 tccatctggg ctgatccaaa attctgagat tgttggtctac ctatattttg ttgcagcttt
 3420
 taaatgtact ctgaacttcc aaaccacatt cattccagcc tggtagaaca aatattcttg
 3480
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 3524

<210> 2624

<211> 895

<212> PRT

<213> Homo sapiens

<400> 2624

Met Lys Ile Gly Ser Gly Phe Leu Ser Gly Gly Gly Gly Thr Gly Ser
 1 5 10 15
 Ser Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly

1867

```

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Leu Ile Phe Lys Lys Gly Ser Arg Lys Asn Thr Asp Lys Asn Tyr Leu
470              475              480
Asn Phe Val Ser Pro Leu Pro Asp Ile Val Gly Gln Lys Ser Leu Ser
      485              490              495
Gly Lys Pro Ser Gly Ser Leu Gly Ile Val Ser Asn Asn Ser Val Glu
      500              505              510
Thr Ile Gly Leu Leu Gln Ser Thr Ser Gly Lys Gln Gly Gln Ile Ser
      515              520              525
Ser Asn Tyr Asp Asp Ala Met Gln Phe Ser Lys Lys Arg Arg Tyr Leu
      530              535              540
Pro Thr Ala Ser Ser Asn Ser Ala Phe Ser Ile Asn Val Gly His Met
545              550              555              560
Val Ser Gln Gln Ser Val Ile Gln Ser Ala Gly Val Ser Val Leu Asp
      565              570              575
Asn Glu Ala Pro Leu Ser Leu Ile Asp Ser Ser Ala Leu Asn Ala Glu
      580              585              590
Ile Lys Ser Cys His Asp Lys Ser Gly Ile Pro Asp Glu Val Leu Gln
      595              600              605
Ser Ile Leu Asp Gln Tyr Ser Asn Lys Ser Glu Ser Gln Lys Glu Asp
      610              615              620
Pro Phe Asn Ile Ala Glu Pro Arg Val Asp Leu His Thr Ser Gly Glu
625              630              635              640
His Ser Glu Leu Val Gln Glu Glu Asn Leu Ser Pro Gly Thr Gln Thr
      645              650              655
Pro Ser Asn Asp Lys Ala Ser Met Leu Gln Glu Tyr Ser Lys Tyr Leu
      660              665              670
Gln Gln Ala Phe Glu Lys Ser Thr Asn Ala Ser Phe Thr Leu Gly His
      675              680              685
Gly Phe Gln Phe Val Ser Leu Ser Ser Pro Leu His Asn His Thr Leu
      690              695              700
Phe Pro Glu Lys Gln Ile Tyr Thr Thr Ser Pro Leu Glu Cys Gly Phe
705              710              715              720
Gly Gln Ser Val Thr Ser Val Leu Pro Ser Ser Leu Pro Lys Pro Pro
      725              730              735
Phe Gly Met Leu Phe Gly Ser Gln Pro Gly Leu Tyr Leu Ser Ala Leu
      740              745              750
Asp Ala Thr His Gln Gln Leu Thr Pro Ser Gln Glu Leu Asp Asp Leu
      755              760              765
Ile Asp Ser Gln Lys Asn Leu Glu Thr Ser Ser Ala Phe Gln Ser Ser
      770              775              780
Ser Gln Lys Leu Thr Ser Gln Lys Glu Gln Lys Asn Leu Glu Ser Ser
785              790              795              800
Thr Gly Phe Gln Ile Pro Ser Gln Glu Leu Ala Ser Gln Ile Asp Pro
      805              810              815
Gln Lys Asp Ile Glu Pro Arg Thr Thr Tyr Gln Ile Glu Asn Phe Ala
      820              825              830
Gln Ala Phe Gly Ser Gln Phe Lys Ser Gly Ser Arg Val Pro Met Thr
      835              840              845
Phe Ile Thr Asn Ser Asn Gly Glu Val Asp His Arg Val Arg Thr Ser
      850              855              860
Val Ser Asp Phe Ser Gly Tyr Thr Asn Met Met Ser Asp Val Ser Glu
865              870              875              880
Pro Cys Ser Thr Arg Val Lys Thr Pro Thr Ser Gln Ser Tyr Arg

```

885

890

895

<210> 2625

<211> 1398

<212> DNA

<213> Homo sapiens

<400> 2625

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caccacgaga aacgcctctt ttgcagcagt ttaaggtagc ttaggggtca ccgtgttgca
120
ttgtgggaag tatagggcgg caagcggagg aggcgtggcg agcggatcat ccgcttccgg
180
agtcgaggtt ttcgggcttg taccgcttgg cgggtgcggc tgggtgtcggc ttgcaggttc
240
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300
ctctccgagg agccgcacgc cggcggcacc atgggtccacc tcactactct cctctgcaag
360
gcctaccgtg ggggccactt aaccatccgc cttgccctgg gtggctgcac caatcgcccg
420
ttctaccgca ttgtggctgc tcacaacaag tgtcccaggg atggccgttt cgtagagcag
480
ctgggctcct atgatccatt gcccaacagt catggagaaa aactcgttgc cctcaaccta
540
gacaggatcc gtcattggat tggctgcggg gcccacctct ctaagcctat ggaaaagctt
600
ctgggtcttg ctggcttttt cctctgcat cctatgatga tcacaaatgc tgagagactg
660
cgaaggaaac gggcacgtga agtcctgtta gcttctcaga aaacagatgc agaagctaca
720
gatacagagg ctacagaaac ataaatgagc tgactttagt gagcatagca gtgggaacaa
780
ggtcaaggtc cttttgaaac actgcagcga tcttaatttt gttagatttg gaggttcaata
840
aatggagtat cctgagttgc ccttgctctt ctggcctggc ctgcacaggg ccaggggaga
900
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960
tcttgggata gacagtggct atgggaggat tggacttttg agttgggctc tgggtctctt
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1080
attcatggcc cattcagatc ttcattgtca tcccacaagt gcaagaacag ttaacctttc
1140
ttaattgatt tttgtaattg gaggtttata ttgtcttgcc taatgcatat tctctttttt
1200
tttttttttg agacggagtc ttgttctgtt gccaggaggg cgatgctgca gtgaactgtg
1260
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atatttcagt gtgcgaaa
1398

<210> 2626

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2626

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Met Val His Leu Thr Thr Leu Leu Cys Lys Ala Tyr Arg Gly Gly His
  1           5           10           15
Leu Thr Ile Arg Leu Ala Leu Gly Gly Cys Thr Asn Arg Pro Phe Tyr
  20           25           30
Arg Ile Val Ala Ala His Asn Lys Cys Pro Arg Asp Gly Arg Phe Val
  35           40           45
Glu Gln Leu Gly Ser Tyr Asp Pro Leu Pro Asn Ser His Gly Glu Lys
  50           55           60
Leu Val Ala Leu Asn Leu Asp Arg Ile Arg His Trp Ile Gly Cys Gly
  65           70           75           80
Ala His Leu Ser Lys Pro Met Glu Lys Leu Leu Gly Leu Ala Gly Phe
           85           90           95
Phe Pro Leu His Pro Met Met Ile Thr Asn Ala Glu Arg Leu Arg Arg
           100          105          110
Lys Arg Ala Arg Glu Val Leu Leu Ala Ser Gln Lys Thr Asp Ala Glu
           115          120          125
Ala Thr Asp Thr Glu Ala Thr Glu Thr
           130          135
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<210> 2627

<211> 320

<212> DNA

<213> Homo sapiens

<400> 2627

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acccagagga acgaaagaaa gctgagtcac aaataaacia ttctgccgtg gaaatgcagg
  120
tgcagtcagc cctagccttt ttgggaacag agaatgatgt tgaactgaag ggggcgctag
  180
atttagaaac ctgtgagaag caagatataa tgccagaagt ggacaagcag tctgggttcgc
  240
cagaaagccg agtagaaaac aactgaaca tacatgaaga ttagattag gttaaactca
  300
ttgaatatta cctgacttag
  320
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<210> 2628

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2628

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Met Phe Ser Val Phe Ser Thr Arg Leu Ser Gly Glu Pro Asp Cys Leu
```

```

      1           5           10           15
Ser Thr Ser Gly Ile Ile Ser Cys Phe Ser Gln Val Ser Lys Ser Ser
      20           25           30
Ala Pro Phe Ser Ser Thr Ser Phe Ser Val Pro Lys Lys Ala Arg Ala
      35           40           45
Asp Cys Thr Cys Ile Ser Thr Ala Glu Leu Phe Ile Cys Asp Ser Ala
      50           55           60
Phe Phe Arg Ser Ser Gly Ser Arg Glu Arg His Ser Phe Lys Val Phe
      65           70           75           80
Phe Leu Cys Ile Pro Pro Pro Leu His Ala
      85           90

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<210> 2629

<211> 650

<212> DNA

<213> Homo sapiens

<400> 2629

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120
atggacaacc tggagaagca gctcatctgc cccatctgcc tggagatggt ctccaaacca
180
gtggtgatcc tgccctgcca acacaacctg tgccgcaaat gtgccaacga cgtcttccag
240
gtgggtgcca gggacgggca gggccaggta aagcaatgca gacctgtggg ggactgatca
300
ggtcagagct gagacccag aaggtgatgg atagagtgt ctctgaggtg ggtggtggct
360
gttgtggctg gagagcagaa gggctgggggt ccaagcaaat cccagagcaa gcatgagtcn
420
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480
gatctaccaa ggaaagtaga ccctgtggaa actgggaggg agggtatccc acaccgggct
540
ttataagagc ctgtgccaga ctctgcattc cagtttggag ttccagactt cgagagcatt
600
gtggaaaata cggagaaaag attaatgaga taatgaaacg ttaaaaaaaaa
650

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<210> 2630

<211> 58

<212> PRT

<213> Homo sapiens

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<210> 2631

<211> 5124

<212> DNA

<213> Homo sapiens

<400> 2631

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<211> 550

<212> PRT

<213> Homo sapiens

<400> 2632

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Ile	Leu	Lys	Phe	Asn	Ser	Lys	Phe	Glu	Ser	Gly	Asn	Leu	Arg	Lys	Val
			35				40					45			
Ile	Gln	Ile	Arg	Lys	Asn	Glu	Tyr	Asp	Leu	Ile	Leu	Asn	Ser	Asp	Ile
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Asn	Ser	Asn	His	Tyr	His	Gln	Trp	Phe	Tyr	Phe	Glu	Val	Ser	Gly	Met
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			85					90					95		
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Glu	Ala	Leu	Asn	Ala	Arg	Pro	Trp	Trp	Ile	Arg	Met	Gly	Thr	Asp	Ile
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Cys	Tyr	Tyr	Lys	Asn	His	Phe	Ser	Arg	Ser	Ser	Val	Ala	Ala	Gly	Gly
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          275          280          285
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          290          295          300
Gln Trp Gln Ser Pro Ser Pro Asp Leu His Pro Thr Ile Tyr His Ala
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Lys Gly Leu Leu Gln Tyr Leu Ala Ala Val Lys Arg Leu Pro Leu Val
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Tyr Cys Asp Tyr His Gly His Ser Arg Lys Lys Asn Val Phe Met Tyr
          340          345          350
Gly Cys Ser Ile Lys Glu Thr Val Trp His Thr Asn Asp Asn Ala Thr
          355          360          365
Ser Cys Asp Val Val Glu Asp Thr Gly Tyr Arg Thr Leu Pro Lys Ile
          370          375          380
Leu Ser His Ile Ala Pro Ala Phe Cys Met Ser Ser Cys Ser Phe Val
385          390          395          400
Val Glu Lys Ser Lys Glu Ser Thr Ala Arg Val Val Val Trp Arg Glu
          405          410          415
Ile Gly Val Gln Arg Ser Tyr Thr Met Glu Ser Thr Leu Cys Gly Cys
          420          425          430
Asp Gln Gly Lys Tyr Lys Gly Leu Gln Ile Gly Thr Arg Glu Leu Glu
          435          440          445
Glu Met Gly Ala Lys Phe Cys Val Gly Leu Leu Arg Leu Lys Arg Leu
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Thr Ser Pro Leu Glu Tyr Asn Leu Pro Ser Ser Leu Leu Asp Phe Glu
465          470          475          480
Asn Asp Leu Ile Glu Ser Ser Cys Lys Val Thr Ser Pro Thr Thr Tyr
          485          490          495
Val Leu Asp Glu Asp Glu Pro Arg Phe Leu Glu Glu Val Asp Tyr Ser
          500          505          510
Ala Glu Ser Asn Asp Glu Leu Asp Ile Glu Leu Ala Glu Asn Val Gly
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<210> 2633

<211> 1569

<212> DNA

<213> Homo sapiens

<400> 2633

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<210> 2634

<211> 59

<212> PRT

<213> Homo sapiens

<400> 2634

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 Ser Phe Ala Glu Glu Leu Ser Arg Ile Leu Glu Lys Arg Lys His Thr
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<211> 1062

<212> DNA

<213> Homo sapiens

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<210> 2636

<211> 63
 <212> PRT
 <213> Homo sapiens

<400> 2636
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 Gly Asp Gly Ser Ile Arg Arg Tyr Phe Cys Gly Glu Ala Ala Ala
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 <211> 1045
 <212> DNA
 <213> Homo sapiens

<400> 2637
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<210> 2638

<211> 263

<212> PRT

<213> Homo sapiens

<400> 2638

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Leu Gln Glu Ala Gly Thr Phe Arg His Thr Leu Trp Lys Arg Val Gln
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Gly Ala Val Thr Pro Leu Leu Ala Ser Met Ile Ser Phe Ile Asp Arg
65 70 75 80
Asp Gly Asn Leu Glu Leu Leu Thr Arg Pro Asp Thr Pro Pro Trp Ala
85 90 95
Arg Asp Leu Trp Met Phe Ile Phe Ser Asp Thr Met Leu Leu Asn Ile
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Pro Leu Val Met Asn Asn Glu Arg His Lys Gly Glu Met Ala Tyr Ile
115 120 125
Val Val Gln Asn His Met Asn Leu Ser Glu Asn Ala Ser Asn Asn Val
130 135 140
Pro Phe Ser Trp Lys Ile Lys Asp Tyr Leu Glu Glu Leu Trp Val Gln
145 150 155 160
Ala Gln Tyr Ile Thr Asp Ala Glu Gly Leu Pro Lys Lys Phe Val Asp
165 170 175
Ile Phe Gln Gln Thr Pro Leu Gly Arg Phe Leu Ala Gln Leu His Gly
180 185 190
Glu Pro Gln Gln Glu Leu Leu Gln Cys Tyr Leu Lys Asp Phe Ile Leu
195 200 205
Leu Thr Met Arg Val Ser Thr Glu Glu Glu Leu Lys Phe Leu Gln Met
210 215 220
Ala Leu Trp Ser Cys Thr Arg Lys Leu Lys Ala Ala Ser Glu Ala Pro
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<210> 2639

<211> 3777

<212> DNA

<213> Homo sapiens

<400> 2639

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<213> Homo sapiens

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Thr	Leu	Thr	Pro	Ala	Lys	Ser	Lys	Glu	Tyr	Arg	Gly	Glu	Phe	Phe	Ser
			180					185					190		
Tyr	Ser	Asp	His	Ser	Gln	Gln	Asp	Ser	Val	Gln	Glu	Gly	Glu	Lys	Pro
		195					200					205			
Tyr	Gln	Cys	Ser	Glu	Cys	Gly	Lys	Ser	Phe	Ser	Gly	Ser	Tyr	Arg	Leu
		210				215					220				
Thr	Gln	His	Trp	Ile	Thr	His	Thr	Arg	Glu	Lys	Pro	Thr	Val	His	Gln
225					230					235					240
Glu	Cys	Glu	Gln	Gly	Phe	Asp	Arg	Asn	Ala	Ser	Leu	Ser	Val	Tyr	Pro
				245					250					255	
Lys	Thr	His	Thr	Gly	Tyr	Lys	Phe	Tyr	Val	Cys	Asn	Glu	Tyr	Gly	Thr
			260					265					270		
Thr	Phe	Ser	Gln	Ser	Thr	Tyr	Leu	Trp	His	Gln	Lys	Thr	His	Thr	Gly
		275					280					285			
Glu	Lys	Pro	Cys	Lys	Ser	Gln	Asp	Ser	Asp	His	Pro	Pro	Ser	His	Asp
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Thr	Gln	Pro	Gly	Glu	His	Gln	Lys	Thr	His	Thr	Asp	Ser	Lys	Ser	Tyr
305					310					315					320
Asn	Cys	Asn	Glu	Cys	Gly	Lys	Ala	Phe	Thr	Arg	Ile	Phe	His	Leu	Thr
				325					330					335	
Arg	His	Gln	Lys	Ile	His	Thr	Arg	Lys	Arg	Tyr	Glu	Cys	Ser	Lys	Cys
			340					345					350		
Gln	Ala	Thr	Phe	Asn	Leu	Arg	Lys	His	Leu	Ile	Gln	His	Gln	Lys	Thr

355	360	365
His Ala Ala Lys Thr Thr Ser Glu Cys Gln Glu Cys Gly Lys Ile Phe		
370	375	380
Arg His Ser Ser Leu Leu Ile Glu His Gln Ala Leu His Ala Gly Glu		
385	390	395
Glu Pro Tyr Lys Cys Asn Glu Arg Gly Lys Ser Phe Arg His Asn Ser		
405	410	415
Thr Leu Lys Ile His Gln Arg Val His Ser Gly Glu Lys Pro Tyr Lys		
420	425	430
Cys Ser Glu Cys Gly Lys Ala Phe His Arg His Thr His Leu Asn Glu		
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His Arg Arg Ile His Thr Gly Tyr Arg Pro His Lys Cys Gln Glu Cys		
450	455	460
Val Arg Ser Phe Ser Arg Pro Ser His Leu Met Arg His Gln Ala Ile		
465	470	475
His Thr Ala Glu Lys Pro Tyr Ser Cys Ala Glu Cys Lys Glu Thr Phe		
485	490	495
Ser Asp Asn Asn Arg Leu Val Gln His Gln Lys Met His Thr Val Lys		
500	505	510
Thr Pro Tyr Glu Cys Gln Glu Cys Gly Glu Arg Phe Ile Cys Gly Ser		
515	520	525
Thr Leu Lys Cys His Glu Ser Val His Ala Arg Glu Lys Gln Gly Phe		
530	535	540
Phe Val Ser Gly Lys Ile Leu Asp Gln Asn Pro Glu Gln Lys Glu Lys		
545	550	555
Cys Phe Lys Cys Asn Lys Cys Glu Lys Thr Phe Ser Cys Ser Lys Tyr		
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Leu Thr Gln Tyr Glu Arg Ile His Thr Arg Gly Val Lys Pro Phe Glu		
580	585	590
Cys Asp Gln Cys Gly Lys Ala Phe Gly Gln Ser Thr Arg Leu Ile His		
595	600	605
His Gln Arg Ile His Ser Arg Val Arg Leu Tyr Lys Trp Gly Glu Gln		
610	615	620
Gly Lys Ala Ile Ser Ser Ala Ser Leu Ile Lys Leu Gln Ser Phe His		
625	630	635
Thr Lys Glu His Pro Phe Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser		
645	650	655
His Ser Ala His Leu Ser Lys His Gln Leu Ile His Ala Gly Glu Asn		
660	665	670
Pro Phe Lys Cys Ser Lys Cys Asp Arg Val Phe Thr Gln Arg Asn Tyr		
675	680	685
Leu Val Gln His Glu Arg Thr His Ala Arg Lys Lys Pro Leu Val Cys		
690	695	700
Asn Glu Cys Gly Lys Thr Phe Arg Gln Ser Ser Cys Leu Ser Lys His		
705	710	715
Gln Arg Ile His Ser Gly Glu Lys Pro Tyr Val Cys Asp Tyr Cys Gly		
725	730	735
Lys Ala Phe Gly Leu Ser Ala Glu Leu Val Arg His Gln Arg Ile His		
740	745	750
Thr Gly Glu Lys Pro Tyr Val Cys Gln Glu Cys Gly Lys Ala Phe Thr		
755	760	765
Gln Ser Ser Cys Leu Ser Ile His Arg Arg Val His Thr Gly Glu Lys		
770	775	780
Pro Tyr Arg Cys Gly Glu Cys Gly Lys Ala Phe Ala Gln Lys Ala Asn		

785		790		795		800									
Leu	Thr	Gln	His	Gln	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Ser	Cys
				805					810					815	
Asn	Val	Cys	Gly	Lys	Ala	Phe	Val	Leu	Ser	Ala	His	Leu	Asn	Gln	His
			820						825					830	
Leu	Arg	Val	His	Thr	Gln	Glu	Thr	Leu	Tyr	Gln	Cys	Gln	Arg	Cys	Gln
			835						840					845	
Lys	Ala	Phe	Arg	Cys	His	Ser	Ser	Leu	Ser	Arg	His	Gln	Arg	Val	His
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Asn	Lys	Gln	Gln	Tyr	Cys	Leu									
865							870								

<210> 2645

<211> 1018

<212> DNA

<213> Homo sapiens

<400> 2645

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 180
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 240
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 aagctgagca gggccttcgg atccccctac ctggcctgct actctctaag catcaccatc
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 900
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<210> 2646

<211> 199
 <212> PRT
 <213> Homo sapiens

<400> 2646
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 35 40 45
 Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Ile Thr Ile Leu Leu Leu Asn
 50 55 60
 Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg
 65 70 75 80
 Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu
 85 90 95
 Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly
 100 105 110
 Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala
 115 120 125
 Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp
 130 135 140
 Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro
 145 150 155 160
 Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala
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 Leu Leu Tyr Glu Glu Pro Phe Thr Ala Glu Ile Tyr Arg Gln Lys Ala
 180 185 190
 Ser Gly Ser His Lys Arg Ser
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<210> 2647
 <211> 1368
 <212> DNA
 <213> Homo sapiens

<400> 2647
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 gcaactactg ctggaatcct tgcaacactt tctcattgta ttgaactaat ggttaaactg
 180
 gaggacagct ggcagaagag actggataag gaaactgaga agaaaagaag aacagaggaa
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 420
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 480

aaggttgaag agatggtgca gaaccacatg acttactcat tacaggatgt aggcggagat
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<210> 2648

<211> 389

<212> PRT

<213> Homo sapiens

<400> 2648

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35 40 45
Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Asp Ser Trp
50 55 60
Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu Glu
65 70 75 80
Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Lys Ser His Phe Gly
85 90 95
Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu Glu
100 105 110
Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile Glu
115 120 125
Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Ser Leu

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      130              135              140
Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val Gln
145              150              155              160
Lys Val Glu Glu Met Val Gln Asn His Met Thr Tyr Ser Leu Gln Asp
      165              170              175
Val Gly Gly Asp Ala Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met
      180              185              190
Lys Val Tyr Arg Arg Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro
      195              200              205
Leu Lys Ala Thr His Ala Val Lys Gly Val Thr Gly His Glu Val Cys
      210              215              220
Asn Tyr Phe Trp Asn Val Asp Val Arg Asn Asp Trp Glu Thr Thr Ile
225              230              235              240
Glu Asn Phe His Val Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Ile
      245              250              255
Tyr Gln Thr His Lys Arg Val Trp Pro Ala Ser Gln Arg Asp Val Leu
      260              265              270
Tyr Leu Ser Val Ile Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro
      275              280              285
Glu Thr Trp Ile Val Cys Asn Phe Ser Val Asp His Asp Ser Ala Pro
      290              295              300
Leu Asn Asn Arg Cys Val Arg Ala Lys Ile Asn Val Ala Met Ile Cys
305              310              315              320
Gln Thr Leu Val Ser Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg Asp
      325              330              335
Asn Ile Leu Cys Lys Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly
      340              345              350
Trp Ala Pro Ala Ser Val Leu Arg Ala Val Ala Lys Arg Glu Tyr Pro
      355              360              365
Lys Phe Leu Lys Arg Phe Thr Ser Tyr Val Gln Glu Lys Thr Ala Gly
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<210> 2649

<211> 1299

<212> DNA

<213> Homo sapiens

<400> 2649

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<210> 2650

<211> 428

<212> PRT

<213> Homo sapiens

<400> 2650

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Leu	Leu	Phe	Leu	Ala	Phe	Leu	Leu	Leu	Ser	Ser	Arg	Thr	Ala	Arg	Ser
			20					25					30		
Glu	Glu	Asp	Arg	Asp	Gly	Leu	Trp	Asp	Ala	Trp	Gly	Pro	Trp	Ser	Glu
		35					40					45			
Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Ala	Ser	Tyr	Ser	Leu	Arg	Arg	Cys
	50					55					60				
Leu	Ser	Ser	Lys	Ser	Cys	Glu	Gly	Arg	Asn	Ile	Arg	Tyr	Arg	Thr	Cys
65				70					75					80	
Ser	Asn	Val	Asp	Cys	Pro	Pro	Glu	Ala	Gly	Asp	Phe	Arg	Ala	Gln	Gln
			85						90					95	
Cys	Ser	Ala	His	Asn	Asp	Val	Lys	His	His	Gly	Gln	Phe	Tyr	Glu	Trp
		100						105					110		
Leu	Pro	Val	Ser	Asn	Asp	Pro	Asp	Asn	Pro	Cys	Ser	Leu	Lys	Cys	Gln
		115					120					125			
Ala	Lys	Gly	Thr	Thr	Leu	Val	Val	Glu	Leu	Ala	Pro	Lys	Val	Leu	Asp

130	135	140
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145	150	155
Cys Gln Ile Val Gly Cys Asp His Gln Leu Gly Ser Thr Val Lys Glu		160
	165	170
Asp Asn Cys Gly Val Cys Asn Gly Asp Gly Ser Thr Cys Arg Leu Val		175
	180	185
Arg Gly Gln Tyr Lys Ser Gln Leu Ser Ala Thr Lys Ser Asp Asp Thr		190
	195	200
Val Val Ala Ile Pro Tyr Gly Ser Arg His Ile Arg Leu Val Leu Lys		205
	210	215
Gly Pro Asp His Leu Tyr Leu Glu Thr Lys Thr Leu Gln Gly Thr Lys		220
225	230	235
Gly Glu Asn Ser Leu Ser Ser Thr Gly Thr Phe Leu Val Asp Asn Ser		240
	245	250
Ser Val Asp Phe Gln Lys Phe Pro Asp Lys Glu Ile Leu Arg Met Ala		255
	260	265
Gly Pro Leu Thr Ala Asp Phe Ile Val Lys Ile Arg Asn Ser Gly Ser		270
	275	280
Ala Asp Ser Thr Val Gln Phe Ile Phe Tyr Gln Pro Ile Ile His Arg		285
	290	295
Trp Arg Glu Thr Asp Phe Phe Pro Cys Ser Ala Thr Cys Gly Gly Gly		300
305	310	315
Tyr Gln Leu Thr Ser Ala Glu Cys Tyr Asp Leu Arg Ser Asn Arg Val		320
	325	330
Val Ala Asp Gln Tyr Cys His Tyr Tyr Pro Glu Asn Ile Lys Pro Lys		335
	340	345
Pro Lys Leu Gln Glu Cys Asn Leu Asp Pro Cys Pro Ala Ser Asp Gly		350
	355	360
Tyr Lys Gln Ile Met Pro Tyr Asp Leu Tyr His Pro Leu Pro Arg Trp		365
	370	375
Glu Ala Thr Pro Trp Thr Ala Cys Ser Ser Ser Cys Gly Gly Gly Ile		380
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Gln Ser Pro Gly Ser Phe Leu Cys Gly Gly His Pro Gly Ala Cys		400
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His Phe Ser Gly Arg Val Glu Met His Val His Pro		415
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<210> 2651

<211> 628

<212> DNA

<213> Homo sapiens

<400> 2651

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120
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180
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300

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<210> 2652

<211> 209

<212> PRT

<213> Homo sapiens

<400> 2652

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			20					25					30		
Leu	Asn	Leu	Ile	Phe	Ile	Val	Leu	Glu	Thr	Gly	Arg	Val	Thr	Lys	Thr
		35					40					45			
Lys	Asp	Gly	His	Glu	Val	Arg	Thr	Cys	Lys	Val	Ala	Asp	Lys	Thr	Gly
	50					55				60					
Ser	Ile	Asn	Ile	Ser	Val	Trp	Asp	Asp	Val	Gly	Asn	Leu	Ile	Gln	Pro
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Gly	Asp	Ile	Ile	Arg	Leu	Thr	Lys	Gly	Tyr	Ala	Ser	Val	Phe	Lys	Gly
				85					90					95	
Cys	Leu	Thr	Leu	Tyr	Thr	Gly	Arg	Gly	Gly	Asp	Leu	Gln	Lys	Ile	Gly
			100					105					110		
Glu	Phe	Cys	Met	Asp	Tyr	Ser	Glu	Val	Pro	Asn	Phe	Ser	Glu	Pro	Asn
		115					120					125			
Pro	Glu	Tyr	Ser	Thr	Gln	Gln	Ala	Pro	Asn	Lys	Ala	Val	Gln	Asn	Asp
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Ser	Asn	Pro	Ser	Ala	Ser	Gln	Pro	Thr	Thr	Gly	Pro	Ser	Ala	Ala	Ser
145					150					155				160	
Pro	Ala	Ser	Glu	Asn	Gln	Asn	Gly	Asn	Gly	Met	Ser	Ala	Pro	Pro	Gly
				165					170					175	
Phe	Arg	Val	Val	Ala	His	Ile	Pro	Leu	Ile	Leu	Pro	Pro	Thr	His	Pro
			180					185					190		
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Leu															

<210> 2653

<211> 2103

<212> DNA

<213> Homo sapiens

<400> 2653

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 1860
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 1920
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 1980
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 2103

<210> 2654
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 <212> PRT
 <213> Homo sapiens

<400> 2654
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 Ser Asp Ser Lys Cys Leu Leu Leu Leu Gly Ala Val Ala His Ala Cys
 35 40 45
 Asn Pro Ser Thr Leu Gly Gly Arg Gly Gly Arg Ile Thr Arg Ser Gly
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 Asp Arg Asp Tyr Pro Gly
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<210> 2655
 <211> 1752
 <212> DNA
 <213> Homo sapiens

<400> 2655
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 300
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420
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480
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540
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600
tctctaaatt ttctttacaa caatcagttt ttttaatttc acaaggcctg cgaattctaa
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1380
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1740
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1752

<210> 2656

<211> 493

<212> PRT

<213> Homo sapiens

<400> 2656

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 20          25          30
Arg Cys Leu Leu Met Pro Gln Cys Asn Ala Phe Leu Ser Lys Ile Met
 35          40          45
Thr Ser Leu Leu Ser Pro Pro His Arg Arg Pro Thr Leu His Arg Arg
 50          55          60
Pro Thr Leu Pro Tyr Arg Thr Trp Glu Ala Ala Leu Arg Gln Lys Val
 65          70          75          80
Gln Gln Trp Tyr Thr Ala Val Gly Gln Thr Glu Asn Pro Asp Asn Cys
 85          90          95
Ala Glu Lys Leu Gly Leu Cys Pro Gln Phe Phe Lys Val Leu Gly Glu
100          105          110
Val Asn Pro Leu Glu Glu Lys Pro Phe His Glu Leu Pro Phe Tyr Gln
115          120          125
Lys Val Trp Leu Leu Lys Gly Leu Cys Asp Phe Val Tyr Asp Thr His
130          135          140
Lys Glu Val Gln Asp Ala Val Leu Gly Gln Pro Ile His Glu Cys Arg
145          150          155          160
Ala Val Ile Leu Arg Tyr Asp Tyr Leu Glu Thr Ala Tyr Val His Phe
165          170          175
Pro Gln Phe Cys Gly Ala Asp Val Arg Ile Tyr Lys Gln Arg Pro Phe
180          185          190
Gln Ala Pro Glu Phe Pro Ile Pro Pro Ile Lys Ile Gln Arg Val Pro
195          200          205
Arg Ile Lys Leu Glu Lys Leu Lys Cys Asp Tyr Val Ser Thr Ser Asn
210          215          220
Gly Glu His Arg Cys Ser Arg Asp Ser Leu Pro Ser Ser Phe Lys Lys
225          230          235          240
Glu Gln Glu Asn Asn Phe Asp Pro Ala Cys Cys Pro Ala Lys Met Ile
245          250          255
Leu Asp Asn His Asp Ile Ser Val Glu Met Gly Val Lys Ser Asn Tyr
260          265          270
Glu Ile Arg Ile Arg Arg Pro Cys Glu Ile Lys Lys Thr Asp Cys Cys
275          280          285
Lys Glu Asn Leu Glu Lys Pro Arg Ser Pro Gly Glu Val Thr Gly Phe
290          295          300
Gly Glu Pro Leu Ser Pro Gly Glu Ile Arg Phe Ile Glu Asn Gln Glu
305          310          315          320
Lys Tyr Gly Glu Ala Ser Arg Ile Lys Ile Glu Pro Ser Pro Leu Lys
325          330          335
Glu Asn Thr Leu Lys Ser Cys Gln Ile His Val Asn Gly Ser His Ser
340          345          350
Asp His Pro Glu Ile Asn Cys His Lys Val Val Arg Asp Ile Leu Leu
355          360          365
Glu Gln Ser Leu Gln Ser His Lys Lys Leu Lys Leu Thr Lys Met Arg
370          375          380
Ala Lys Lys Lys Lys Lys Lys Lys Lys Leu Lys Asp Val Leu Asn
385          390          395          400
Glu Asn Leu Gln Arg Lys Arg Glu Gly Leu His Ser Leu Ala Phe Lys
405          410          415
Ser Tyr Lys Pro Glu Ile Gln Asn Lys Leu Leu Ile Ile Lys Lys Lys

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	420		425		430										
Ala	Lys	His	Lys	Lys	His	Lys	Ser	Gly	Lys	Lys	Ser	Val	Ser	Lys	Lys
	435				440		445								
Ala	Ile	Thr	Lys	Lys	Arg	Lys	Thr	Val	Ile	Lys	Ser	Pro	Thr	Val	Pro
	450				455		460								
Glu	Phe	Gln	Leu	Ile	Cys	Thr	Asn	Leu	Asp	Glu	Leu	Arg	Glu	Leu	Ile
	465				470		475							480	
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<210> 2657

<211> 972

<212> DNA

<213> Homo sapiens

<400> 2657

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120
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180
gcgtcagatc agagttgcc a tcttcaactt gatatgcccc ccacatccca gcagctctgt
240
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300
aggagcctca aaactgaaat gcacgtgctt cggaccagcc atccgtgcct gacaatgtcc
360
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420
taattccagc tgggaccgcc taggagcgcc atgcagctgt gggaacaagg ttgctgtcca
480
cacagacatg aagggattcc ccgtggaatg aggttagaaa aggaagggca agagtggacg
540
tataagatgc cccatgctgt gtgaaaactg ccatgagaga gagacggagg aagggggaga
600
aagtgggaga cagagaccaa catctgcact gcctgtgcct gccacactct cccctcgggg
660
ccagaggggtg gcctctgggg aggggctggc gagaggggat gccaggcctg ggctgcagca
720
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780
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840
ggcggctgtg caggggctgg gcattgatat acagggctcg gtagaactcc tggcagctcc
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<210> 2658

<211> 76

<212> PRT

<213> Homo sapiens

<400> 2658

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Glu Arg Asp Gly Gly Arg Gly Arg Lys Trp Glu Thr Glu Thr Asn Ile
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Cys Thr Ala Cys Ala Cys His Thr Leu Pro Ser Gly Pro Glu Gly Gly
          20           25           30
Leu Trp Gly Gly Ala Gly Glu Arg Gly Cys Gln Ala Trp Ala Ala Ala
          35           40           45
Asp Leu Gly Gly His Gly Gly Ser Met Pro Ser Thr Ala Gly Trp Gly
          50           55           60
Ala Leu Pro Gly Pro Ala Pro Ser Met His Gly Trp
65           70           75

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<210> 2659

<211> 691

<212> DNA

<213> Homo sapiens

<400> 2659

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120
aatggagaga acaccttcaa acgcattgga ccccgctgg agaagcctgt ggagaagggtg
180
cagagggtgg aggccctccc gagggccggt cgcgagaacc tgccacagcc acagatgcca
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ccctatgcct tcgcgcaccc acccttcccc ctgcctcccg tgcggcctgt gttcaacaac
300
ttcccactca acatggggcc tatcccagcc ccgtacgtgc cccctctgcc caacgtgcgg
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<210> 2660

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2660

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Thr Phe Lys Arg Ile Gly Pro Pro Leu Glu Lys Pro Val Glu Lys Val

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<460> 2661
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gaattagaca gattttctgt tttgaatagc caacacatgt ttgaagtact agctgccatg
180
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gggtgtcctt taagaataat gatcaacata ttgcagtcct gcaaagacct ccagtaccat
300
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420
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480
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540
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720
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caagtgttac cactttctga tgtggataca acttctgcta cagatattca aagagtagct
1020

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 1140
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 1395

<210> 2662

<211> 415

<212> PRT

<213> Homo sapiens

<400> 2662

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 20 25 30
 Lys Leu Glu Met Lys Ala Leu Arg Glu Leu Asp Arg Phe Ser Val Leu
 35 40 45
 Asn Ser Gln His Met Phe Glu Val Leu Ala Ala Met Asn His Arg Ser
 50 55 60
 Leu Ile Leu Leu Asp Glu Cys Ser Lys Val Val Leu Asp Asn Ile His
 65 70 75 80
 Gly Cys Pro Leu Arg Ile Met Ile Asn Ile Leu Gln Ser Cys Lys Asp
 85 90 95
 Leu Gln Tyr His Asn Leu Asp Leu Phe Lys Gly Leu Ala Asp Tyr Val
 100 105 110
 Ala Ala Thr Phe Asp Ile Trp Lys Phe Arg Lys Val Leu Phe Ile Leu
 115 120 125
 Ile Leu Phe Glu Asn Leu Gly Phe Arg Pro Val Gly Leu Met Asp Leu
 130 135 140
 Phe Met Lys Arg Ile Val Glu Asp Pro Glu Ser Leu Asn Met Lys Asn
 145 150 155 160
 Ile Leu Ser Ile Leu His Thr Tyr Ser Ser Leu Asn His Val Tyr Lys
 165 170 175
 Cys Gln Asn Lys Glu Gln Phe Val Glu Val Met Ala Ser Ala Leu Thr
 180 185 190
 Gly Tyr Leu His Thr Ile Ser Ser Glu Asn Leu Leu Asp Ala Val Tyr
 195 200 205
 Ser Phe Cys Leu Met Asn Tyr Phe Pro Leu Ala Pro Phe Asn Gln Leu
 210 215 220
 Leu Gln Lys Asp Ile Ile Ser Glu Leu Leu Thr Ser Asp Asp Met Lys
 225 230 235 240
 Asn Ala Tyr Lys Leu His Thr Leu Asp Thr Cys Leu Lys Leu Asp Asp
 245 250 255
 Thr Val Tyr Leu Arg Asp Ile Ala Leu Ser Leu Pro Gln Leu Pro Arg

	260		265		270										
Glu	Leu	Pro	Ser	Ser	His	Thr	Asn	Ala	Lys	Val	Ala	Glu	Val	Leu	Ser
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Ser	Leu	Gly	Gly	Glu	Gly	His	Phe	Ser	Lys	Asp	Val	His	Leu	Pro	
	290					295				300					
His	Asn	Tyr	His	Ile	Asp	Phe	Glu	Ile	Arg	Met	Asp	Thr	Asn	Arg	Asn
305				310					315					320	
Gln	Val	Leu	Pro	Leu	Ser	Asp	Val	Asp	Thr	Thr	Ser	Ala	Thr	Asp	Ile
			325						330				335		
Gln	Arg	Val	Ala	Val	Leu	Cys	Val	Ser	Arg	Ser	Ala	Tyr	Cys	Leu	Gly
		340						345				350			
Ser	Ser	His	Pro	Arg	Gly	Phe	Leu	Ala	Met	Lys	Met	Arg	His	Leu	Asn
	355					360						365			
Ala	Met	Gly	Phe	His	Val	Ile	Leu	Val	Asn	Asn	Trp	Glu	Met	Asp	Lys
	370					375					380				
Leu	Glu	Met	Glu	Asp	Ala	Val	Thr	Phe	Leu	Lys	Thr	Lys	Ile	Tyr	Ser
385				390					395					400	
Val	Glu	Ala	Leu	Pro	Val	Ala	Ala	Val	Asn	Val	Gln	Ser	Thr	Gln	
			405					410						415	

<210> 2663

<211> 1024

<212> DNA

<213> Homo sapiens

<400> 2663

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 720
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 840

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 1024

<210> 2664
 <211> 199
 <212> PRT
 <213> Homo sapiens

<400> 2664
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 Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser
 35 40 45
 Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Val Thr Ile Leu Leu Leu Asn
 50 55 60
 Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg
 65 70 75 80
 Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu
 85 90 95
 Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly
 100 105 110
 Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala
 115 120 125
 Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp
 130 135 140
 Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro
 145 150 155 160
 Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala
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 180 185 190
 Ser Gly Ser His Lys Arg Ser
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<210> 2665
 <211> 720
 <212> DNA
 <213> Homo sapiens

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 gcgccaatgc gaagcgttgc agtcgcttga ctcacctgag gctctccaag gataccttca
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 360
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 420
 acaccaagga ccaaaatggt cagcctcca tcagagtctc agctggtgga cacgggaacc
 480
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<210> 2666

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2666

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Tyr	Glu	Val	Cys	Gln	Val	Asn	Gly	Arg	Asp	Leu	Ser	Arg	Ala	Thr	His
			20					25					30		
Asp	Gln	Ala	Val	Glu	Ala	Phe	Lys	Thr	Ala	Lys	Glu	Pro	Ile	Val	Val
			35					40					45		
Gln	Val	Leu	Arg	Arg	Thr	Pro	Arg	Thr	Lys	Met	Phe	Thr	Pro	Pro	Ser
			50					55				60			
Glu	Ser	Gln	Leu	Val	Asp	Thr	Gly	Thr	Gln	Thr	Asp	Ile	Thr	Phe	Glu
65					70					75				80	
His	Ile	Met	Ala	Leu	Thr	Lys	Met	Ser	Ser	Pro	Ser	Pro	Pro	Val	Leu
				85					90					95	
Asp	Pro	Tyr	Leu	Leu	Pro	Glu	Glu	His	Pro	Ser	Ala	His	Glu	Tyr	Tyr
			100					105					110		
Asp	Pro	Asn	Asp	Tyr	Ile	Gly	Asp	Ile	His	Gln	Glu	Met	Asp	Arg	Glu
			115					120					125		
Glu	Leu	Glu	Leu	Glu	Glu	Val	Asp	Leu	Tyr	Arg	Met	Asn	Ser	Gln	Asp
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<210> 2667

<211> 289

<212> DNA

<213> Homo sapiens

<400> 2667

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 180
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<210> 2668

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2668

Xaa	Met	Gly	Asn	Gly	Met	Asn	Lys	Ile	Leu	Pro	Gly	Leu	Tyr	Ile	Gly
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Asn	Phe	Lys	Asp	Ala	Arg	Asp	Ala	Glu	Gln	Leu	Ser	Lys	Asn	Lys	Gly
			20					25					30		
Asn	Pro	Phe	Ser	Val	Cys	Pro	Arg	Trp	Val	Pro	Gly	Leu	Cys	Trp	Arg
			35					40					45		
Thr	Arg	His	Phe	Lys	Glu	Ser	Ile	Lys	Phe	Ile	His	Glu	Cys	Arg	Leu
			50					55				60			
Arg	Gly	Glu	Ser	Cys	Leu	Val	His	Cys	Leu	Ala	Gly	Val	Ser	Arg	Ser
65					70					75				80	
Val	Thr	Leu	Val	Ile	Ala	Tyr	Ile	Met	Thr	Val	Thr	Asp	Phe	Gly	Trp
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<210> 2669

<211> 4285

<212> DNA

<213> Homo sapiens

<400> 2669

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<210> 2670

<211> 979

<212> PRT

<213> Homo sapiens

<400> 2670

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			20					25					30		
Cys	Met	Glu	Lys	Leu	Arg	Asp	Ala	Arg	Leu	Cys	Pro	His	Cys	Ser	Lys
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Leu	Cys	Cys	Phe	Ser	Cys	Ile	Arg	Arg	Trp	Leu	Thr	Glu	Gln	Arg	Ala
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Gln	Cys	Pro	His	Cys	Arg	Ala	Pro	Leu	Gln	Leu	Arg	Glu	Leu	Val	Asn
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Cys	Arg	Trp	Ala	Glu	Val	Thr	Gln	Gln	Leu	Asp	Thr	Leu	Gln	Leu	
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Cys	Ser	Leu	Thr	Lys	His	Glu	Glu	Asn	Glu	Lys	Asp	Lys	Cys	Glu	Asn
		100						105					110		
His	His	Glu	Lys	Leu	Ser	Val	Phe	Cys	Trp	Thr	Cys	Lys	Lys	Cys	Ile
		115					120				125				
Cys	His	Gln	Cys	Ala	Leu	Trp	Gly	Gly	Met	His	Gly	Gly	His	Thr	Phe
	130					135					140				
Lys	Pro	Leu	Ala	Glu	Ile	Tyr	Glu	Gln	His	Val	Thr	Lys	Val	Asn	Glu
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Glu	Val	Ala	Lys	Leu	Arg	Arg	Arg	Leu	Met	Glu	Leu	Ile	Ser	Leu	Val
			165					170					175		
Gln	Glu	Val	Glu	Arg	Asn	Val	Glu	Ala	Val	Arg	Asn	Ala	Lys	Asp	Glu
		180					185					190			
Arg	Val	Arg	Glu	Ile	Arg	Asn	Ala	Val	Glu	Met	Met	Ile	Ala	Arg	Leu
	195					200						205			
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Ser	Leu	Thr	Gln	Glu	Thr	Glu	Leu	Leu	Glu	Ser	Leu	Leu	Gln	Glu	Val
225					230					235				240	
Glu	His	Gln	Leu	Arg	Ser	Cys	Ser	Lys	Ser	Glu	Leu	Ile	Ser	Lys	Ser

245 250 255
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 260 265 270
 Ser Phe Val Thr Thr Pro Val Pro Pro Asp Phe Thr Ser Glu Leu Val
 275 280 285
 Pro Ser Tyr Asp Ser Ala Thr Phe Val Leu Glu Asn Phe Ser Thr Leu
 290 295 300
 Arg Gln Arg Ala Asp Pro Val Tyr Ser Pro Pro Leu Gln Val Ser Gly
 305 310 315 320
 Leu Cys Trp Arg Leu Lys Val Tyr Pro Asp Gly Asn Gly Val Val Arg
 325 330 335
 Gly Tyr Tyr Leu Ser Val Phe Leu Glu Leu Ser Ala Gly Leu Pro Glu
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 Thr Ser Lys Tyr Glu Tyr Arg Val Glu Met Val His Gln Ser Cys Asn
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 Asp Pro Thr Lys Asn Ile Ile Arg Glu Phe Ala Ser Asp Phe Glu Val
 370 375 380
 Gly Glu Cys Trp Gly Tyr Asn Arg Phe Phe Arg Leu Asp Leu Leu Ala
 385 390 395 400
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 Gln Val Arg Ser Pro Thr Phe Phe Gln Lys Ser Arg Asp Gln His Trp
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 Tyr Ile Thr Gln Leu Glu Ala Ala Gln Thr Ser Tyr Ile Gln Gln Ile
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 Asn Asn Leu Lys Glu Arg Leu Thr Ile Glu Leu Ser Arg Thr Gln Lys
 450 455 460
 Ser Arg Asp Leu Ser Pro Pro Asp Asn His Leu Ser Pro Gln Asn Asp
 465 470 475 480
 Asp Ala Leu Glu Thr Arg Ala Lys Lys Ser Ala Cys Ser Asp Met Leu
 485 490 495
 Leu Glu Gly Gly Pro Thr Thr Ala Ser Val Arg Glu Ala Lys Glu Asp
 500 505 510
 Glu Glu Asp Glu Glu Lys Ile Gln Asn Glu Asp Tyr His His Glu Leu
 515 520 525
 Ser Asp Gly Asp Leu Asp Leu Asp Leu Val Tyr Glu Asp Glu Val Asn
 530 535 540
 Gln Leu Asp Gly Ser Ser Ser Ser Ala Ser Ser Thr Ala Thr Ser Asn
 545 550 555 560
 Thr Glu Glu Asn Asp Ile Asp Glu Glu Thr Met Ser Gly Glu Asn Asp
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 Val Glu Tyr Asn Asn Met Glu Leu Glu Glu Gly Glu Leu Met Glu Asp
 580 585 590
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 595 600 605
 Ser Ser Arg Ile Ser Arg Arg Thr His Leu Cys Ser Ala Ala Thr Ser
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 Ser Leu Leu Asp Ile Asp Pro Leu Ile Leu Ile His Leu Leu Asp Leu
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 Pro Ala Ser Leu Leu Gln Pro Thr Ala Ser Tyr Ser Arg Lys Asp Lys
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 Ser Lys Gly Asp Cys Gln Thr Leu Ser Glu Gly Ser Pro Gly Ser Ser
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 Ile Gly Asp Ile Leu Pro Lys Thr Glu Asp Arg Gln Cys Lys Ala Leu
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 Asp Ser Asp Ala Val Val Val Ala Val Phe Ser Gly Leu Pro Ala Val
 850 855 860
 Glu Lys Arg Arg Lys Met Val Thr Leu Gly Ala Asn Ala Lys Gly Gly
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 His Leu Glu Gly Leu Gln Met Thr Asp Leu Glu Asn Asn Ser Glu Thr
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 Gly Glu Leu Gln Pro Val Leu Pro Glu Gly Ala Ser Ala Ala Pro Glu
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 915 920 925
 Glu Gln Glu Glu His Thr Ser Val Gly Gly Phe His Asp Ser Phe Met
 930 935 940
 Val Met Thr Gln Pro Pro Asp Glu Asp Thr His Ser Ser Phe Pro Asp
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<210> 2671

<211> 814

<212> DNA

<213> Homo sapiens

<400> 2671

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<210> 2672

<211> 223

<212> PRT

<213> Homo sapiens

<400> 2672

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 Phe Ala Ile Leu Ser Pro Ser Pro Tyr Leu Arg Pro Arg Gly Arg Ala
 50 55 60
 His His Pro Pro Ser Arg Leu Gly Gly Gly Arg Ala Pro Ser Trp Pro
 65 70 75 80
 Pro Pro Ser Arg Pro Leu Asn Ser Pro Gly Asp Cys Gly Tyr Cys His
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 Arg Leu Ala Ser Thr Ala Ser Ser Arg Ser Thr Gln Met Arg Thr Val
 100 105 110
 Gly Gly Lys Lys Gly Asp Ala Thr Pro Ser Glu Pro Pro Leu Pro Leu
 115 120 125
 Pro Arg Pro Xaa Pro Lys Trp Pro Pro Pro Ser Arg Pro Pro Pro Pro
 130 135 140
 Pro Leu Pro Pro Pro Leu Ala Arg Asn Arg Tyr Arg Arg Arg Gly Pro
 145 150 155 160
 Ser Ser Arg Glu Arg Gln Ser Pro Ser Lys Leu Gln Gln Val Ser Ser
 165 170 175
 Gly Thr Trp Ala Ser Arg Phe Pro Trp Gln Pro Thr Ser Val Ala Leu
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 Leu Arg Phe Thr Arg Gly Trp Phe Pro Asp Ser Phe Gln Thr Pro Leu
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210 215 220

<210> 2673
 <211> 5035
 <212> DNA
 <213> Homo sapiens

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<210> 2674

<211> 690

<212> PRT

<213> Homo sapiens

<400> 2674

Ala	Ala	Gly	Phe	Arg	Ala	Met	Ile	Pro	Pro	Gln	Glu	Ala	Ser	Ala	Arg
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Arg	Arg	Glu	Ile	Glu	Asp	Lys	Leu	Lys	Gln	Glu	Glu	Glu	Thr	Leu	Ser
		20					25						30		
Phe	Ile	Arg	Asp	Ser	Leu	Glu	Lys	Ser	Asp	Gln	Leu	Thr	Lys	Asn	Met
	35					40					45				
Val	Ser	Ile	Leu	Ser	Ser	Phe	Glu	Ser	Arg	Leu	Met	Lys	Leu	Glu	Asn
	50				55					60					
Ser	Ile	Ile	Pro	Val	His	Lys	Gln	Thr	Glu	Asn	Leu	Gln	Arg	Leu	Gln
65				70					75					80	
Glu	Asn	Val	Glu	Lys	Thr	Leu	Ser	Cys	Leu	Asp	His	Val	Ile	Ser	Tyr
		85				90						95			
Tyr	His	Val	Ala	Ser	Asp	Thr	Glu	Lys	Ile	Ile	Arg	Glu	Gly	Pro	Thr
		100					105						110		
Gly	Arg	Leu	Glu	Glu	Tyr	Leu	Gly	Ser	Met	Ala	Lys	Ile	Gln	Lys	Ala
		115				120						125			
Val	Glu	Tyr	Phe	Gln	Asp	Asn	Ser	Pro	Asp	Ser	Pro	Glu	Leu	Asn	Lys
	130				135						140				
Val	Lys	Leu	Leu	Phe	Glu	Arg	Gly	Lys	Glu	Ala	Leu	Glu	Ser	Glu	Phe
145				150					155					160	
Arg	Ser	Leu	Met	Thr	Arg	His	Ser	Lys	Val	Val	Ser	Pro	Val	Leu	Ile
		165				170							175		
Leu	Asp	Leu	Ile	Ser	Gly	Asp	Asp	Asp	Leu	Glu	Ala	Gln	Glu	Asp	Val
	180					185						190			
Thr	Leu	Glu	His	Leu	Pro	Glu	Ser	Val	Leu	Gln	Asp	Val	Ile	Arg	Ile
	195				200						205				
Ser	Arg	Trp	Leu	Val	Glu	Tyr	Gly	Arg	Asn	Gln	Asp	Phe	Met	Asn	Val
	210				215						220				
Tyr	Tyr	Gln	Ile	Arg	Ser	Ser	Gln	Leu	Asp	Arg	Ser	Ile	Lys	Gly	Leu
225				230					235					240	
Lys	Glu	His	Phe	His	Lys	Ser	Ser	Ser	Ser	Ser	Gly	Val	Pro	Tyr	Ser
		245						250					255		
Pro	Ala	Ile	Pro	Asn	Lys	Arg	Lys	Asp	Thr	Pro	Thr	Lys	Lys	Pro	Val

1920

690

<210> 2675

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2675

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 120
 gcagtgggag tccctgcgct tcggcgaata tggagaccct ctgcagtgtg gagcctgggt
 180
 cgggcagtgc gctctttaca tcgtgatcat gatttttgaa aagtctgtcg tcttcacgt
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 300
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 420
 caaccaggac tcgaggaatg ggagcaaggt ccgctaccgg agggccgcat cccacgagga
 480
 gtctgagtct gagatcctga tctcagcgga tgatgagatg gaggagtccg acgtggagga
 540
 ggacctccgc agactgaccc ccctcaagcc tgtgaagaaa aagaagcacc gctttgggct
 600
 acccgatga cacattocca tgctgggggt gacgggaggg ccccgccagc cgctgggtgtg
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<210> 2676

<211> 180

<212> PRT

<213> Homo sapiens

<400> 2676

Met Leu Leu Ile Tyr Val Gly Val Arg Ala Val Ser Val Leu Val Glu
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 Trp Gln Gln Trp Glu Ser Leu Arg Phe Gly Glu Tyr Gly Asp Pro Leu
 20 25 30
 Gln Cys Gly Ala Trp Val Gly Gln Cys Ala Leu Tyr Ile Val Ile Met
 35 40 45
 Ile Phe Glu Lys Ser Val Val Phe Ile Val Leu Leu Leu Gln Trp
 50 55 60
 Lys Lys Val Ala Leu Leu Asn Pro Ile Glu Asn Pro Asp Leu Lys Leu
 65 70 75 80
 Ala Ile Val Met Leu Ile Val Pro Phe Phe Val Asn Ala Leu Met Phe
 85 90 95
 Trp Val Val Asp Asn Phe Leu Met Arg Lys Gly Lys Thr Lys Ala Lys
 100 105 110
 Leu Glu Glu Arg Gly Ala Asn Gln Asp Ser Arg Asn Gly Ser Lys Val

```

      115              120              125
Arg Tyr Arg Arg Ala Ala Ser His Glu Glu Ser Glu Ser Glu Ile Leu
      130              135              140
Ile Ser Ala Asp Asp Glu Met Glu Glu Ser Asp Val Glu Glu Asp Leu
145              150              155              160
Arg Arg Leu Thr Pro Leu Lys Pro Val Lys Lys Lys Lys His Arg Phe
      165              170              175
Gly Leu Pro Val
      180

```

<210> 2677
 <211> 735
 <212> DNA
 <213> Homo sapiens

```

<400> 2677
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120
gagccccctt tgcagggcag gagctgggga gtggttagga catcagtcct tcaggtaggg
180
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240
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300
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360
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420
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480
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540
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600
tcagccccga gccagctgtt gtcctgtctc ctgggggggc tggtcaggaa cctggggacc
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720
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735

```

<210> 2678
 <211> 170
 <212> PRT
 <213> Homo sapiens

```

<400> 2678
Leu Ala Ala Leu Ser Ala Ala Trp Gly Arg Asp Gly Gln Val His Gly
1      5      10      15
Pro Ala Cys Val Ser Thr Pro Pro Ser Ala Gly Ala Phe Ser Leu Leu
      20      25      30
Arg Glu Asn Phe Ser His Ala Pro Ser Pro Asp Met Ser Ala Ala Ser

```



```

      35              40              45
Leu Cys Ala Leu Glu Gln Leu Met Met Ala Gln Ala Gln Glu Cys Val
  50              55              60
Phe Glu Gly Leu Ser Pro Pro Ala Ser Met Ala Pro Gln Asp Cys Leu
  65              70              75              80
Ala Gln Leu Arg Leu Ala Gln Glu Ala Ala Gln Val Ser Ser Gly Thr
      85              90              95
Arg Val Arg Met Gln Gly Val Gly Pro Ser Trp Gly Gln Ser Pro Gly
      100              105              110
Pro Gly Met Arg Glu Leu Ser His Leu Leu Pro Cys Val Ser Ala Pro
      115              120              125
Ser Gln Leu Leu Ser Cys Ser Leu Gly Gly Leu Val Arg Asn Leu Gly
      130              135              140
Thr Arg Ala Ser Ala Ser Arg Glu Trp His Lys Ala Ala Gly Thr Glu
  145              150              155              160
Val Pro Gly Arg Leu Leu Gly Trp Trp Ser
      165              170

```

<210> 2679
 <211> 560
 <212> DNA
 <213> Homo sapiens

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<400> 2679
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120
ggctgcagac aaagtgcggc aacagggact ccaccaggcc atggagctca tcccacaaga
180
cgctcaccg cacaggaggg ctgacccag ggaaactgt caccaggaca cagcacgaag
240
ctcaaaaggg gctagcatgc tctgtgcagc tgccagactc tgccctgaag aatcacaggg
300
cactctagtg agcgctgcag cagccagcag gccctggatg gccaggtgtg cagtggggag
360
gcacaggggg tgcaccagga cgcagccaga cctgggcccag ttcgcgccga ctcttctcca
420
ttccagaggt ccaggaagca cctgtcaatg tggaagtcag aatgctcagg ccaaataccg
480
agatcaacta actattcagg ttgaaccaga ggcctgggcg ggggcatcca actgccacc
540
cgtcagactg agggacgcgt
560

```

<210> 2680
 <211> 133
 <212> PRT
 <213> Homo sapiens

```

<400> 2680
Met Glu Leu Ile Pro Gln Asp Ala Ser Pro His Arg Arg Ala Asp Pro
  1              5              10              15
Arg Glu Thr Cys His Gln Asp Thr Ala Arg Ser Ser Lys Gly Ala Ser

```

```

      20      25      30
Met Leu Cys Ala Ala Ala Arg Leu Cys Pro Glu Glu Ser Gln Gly Thr
      35      40      45
Leu Val Ser Ala Ala Ala Ala Ser Arg Pro Trp Met Ala Arg Cys Ala
      50      55      60
Val Gly Arg His Arg Gly Cys Thr Arg Thr Gln Pro Asp Leu Gly Gln
      65      70      75      80
Phe Ala Pro Thr Leu Leu His Ser Arg Gly Pro Gly Ser Thr Cys Gln
      85      90      95
Cys Gly Ser Gln Asn Ala Gln Ala Lys Tyr Arg Asp Gln Leu Thr Ile
      100      105      110
Gln Val Glu Pro Glu Ala Trp Ala Gly Ala Ser Asn Cys Pro Pro Val
      115      120      125
Arg Leu Arg Asp Ala
      130

```

<210> 2681

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2681

```

gattctctag tagccctaatt tctacccatc tggctactaa ttcaaacttt cttccttcac
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atctgtttgt ggactttctcc aatataacta gtatgcctgg gctcattctg cttcttctct
120
tctggaatag tttatttcat gaccatgtgc agaggggggtg atgggggcaag cctcacaagc
180
cccggagggtc tgtggctgag gtgtaccttg gctttgttgc ctggaactgc tctgactctg
240
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300
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360
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420
ggacaacggt ccagatttgt tttcagtact aatggttcat ctcttttttt ctgttcatcc
480
attttccttt tcctgttttc tgtatcctct ggtaacagct tgtggatttg atcttcagag
540
ggtttttctt cttgtaactt ttcttctctc agcttttctca agctt
585

```

<210> 2682

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2682

```

Met Asp Glu Gln Lys Lys Arg Asp Glu Pro Leu Val Leu Lys Thr Asn
1      5      10      15
Leu Glu Arg Cys Pro Ala Arg Leu Ser Asp Ser Glu Asn Glu Glu Pro
20      25      30
Ser Arg Gly Gln Met Thr Gln Thr His Arg Ser Ala Phe Val Ser Lys

```

```

      35      40      45
Asn Asn Ser Tyr Ser Leu Ala Phe Leu Ala Gly Lys Leu Asn Ser Lys
 50      55      60
Val Glu Arg Ser Gln Ser Cys Ser Asp Thr Ala Gln Glu Arg Ala Lys
65      70      75      80
Ser Arg Val Arg Ala Val Pro Gly Asn Lys Ala Lys Val His Leu Ser
      85      90      95
His Arg Pro Pro Gly Leu Val Arg Leu Ala Pro Ser Pro Pro Leu His
      100      105      110
Met Val Met Lys
      115

```

<210> 2683
 <211> 498
 <212> DNA
 <213> Homo sapiens

```

<400> 2683
nacgcgttac actgactcca aaactctcct tgggtggccta ggtgaaacct catggccaac
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atcacctgga tggccaacca cactggaagg ttggatttca tcctcatggg actcttcaga
120
cgatccaaac atccagctct acttagtggtg gtcattcttg tggttttcct gatggcggtg
180
tctgaaaatg ctgtectgat ccttctgata cactgtgaca cctacctcca caccctcatg
240
tactttttca tcatgcaatt gtctctcatg gacatggcgt acatttctgt cactgtgccc
300
aagatgctcc tggaccaggt catgggtgtg aataagatct cagccctga gtgtgggatg
360
cagatgttcc tctatctgac actagcaggt tcggaatttt tccttctagc caccatggcc
420
tatgaccgct acgtggccat ctgccatcct ctccgttacc ctgtcctcat gaaccatagg
480
gtctgtcttt tcctggca
498

```

<210> 2684
 <211> 149
 <212> PRT
 <213> Homo sapiens

```

<400> 2684
Met Ala Asn Ile Thr Trp Met Ala Asn His Thr Gly Arg Leu Asp Phe
 1      5      10      15
Ile Leu Met Gly Leu Phe Arg Arg Ser Lys His Pro Ala Leu Leu Ser
      20      25      30
Val Val Ile Phe Val Val Phe Leu Met Ala Leu Ser Glu Asn Ala Val
      35      40      45
Leu Ile Leu Leu Ile His Cys Asp Thr Tyr Leu His Thr Pro Met Tyr
      50      55      60
Phe Phe Ile Ser Gln Leu Ser Leu Met Asp Met Ala Tyr Ile Ser Val
65      70      75      80
Thr Val Pro Lys Met Leu Leu Asp Gln Val Met Gly Val Asn Lys Ile

```

```

      85              90              95
Ser Ala Pro Glu Cys Gly Met Gln Met Phe Leu Tyr Leu Thr Leu Ala
      100              105              110
Gly Ser Glu Phe Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Val
      115              120              125
Ala Ile Cys His Pro Leu Arg Tyr Pro Val Leu Met Asn His Arg Val
      130              135              140
Cys Leu Phe Leu Ala
145

```

<210> 2685

<211> 391

<212> DNA

<213> Homo sapiens

<400> 2685

```

ngccggctgc acacgctgcc acctgggctg cctcgaaatg tccatgtgct gaaggccaag
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cgcaatgagc tggtgcccct ggcacgaggg gcgctggcgg gcatggctca gcttcgggaa
120
ctctacctca caggcaaccg actgcgaagc cgggccctgg gccccctgc ctgggtggac
180
ctcgcccatc tgcagttgct ggacatcgcc gggaatcagc tcacagagat cccggagggg
240
ctccccccat cgctggagta tctgtacctg cagaataaca agattagcgc tgttcctgcc
300
agcgcccttg actctactcc caacctcaag gggatctttc tcaggttcaa caagctggct
360
gtgggctccg tagtagaaag cgccttcggg a
391

```

<210> 2686

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2686

```

Xaa Arg Leu His Thr Leu Pro Pro Gly Leu Pro Arg Asn Val His Val
1      5      10      15
Leu Lys Val Lys Arg Asn Glu Leu Ala Ala Leu Ala Arg Gly Ala Leu
20     25     30
Ala Gly Met Ala Gln Leu Arg Glu Leu Tyr Leu Thr Gly Asn Arg Leu
35     40     45
Arg Ser Arg Ala Leu Gly Pro Arg Ala Trp Val Asp Leu Ala His Leu
50     55     60
Gln Leu Leu Asp Ile Ala Gly Asn Gln Leu Thr Glu Ile Pro Glu Gly
65     70     75     80
Leu Pro Pro Ser Leu Glu Tyr Leu Tyr Leu Gln Asn Asn Lys Ile Ser
85     90     95
Ala Val Pro Ala Ser Ala Phe Asp Ser Thr Pro Asn Leu Lys Gly Ile
100    105    110
Phe Leu Arg Phe Asn Lys Leu Ala Val Gly Ser Val Val Glu Ser Ala
115    120    125
Phe Arg

```

130

<210> 2687

<211> 399

<212> DNA

<213> Homo sapiens

<400> 2687

nagtgaaga aatgtttaat acaagagatt gaaccctacc aaaatgggag gtttagcctc
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caggaatggg agtgcaataa atctctaata caagagattg agcctcacca acctccagga
120
tgggaaatga caggtaagac agggactaca aaagaccaag cagacaataa aattccccct
180
gacagtcgc taggccttat gttaagatac cggaaagata atgaaaggac caaacacaag
240
aaaagacagc aaatgataaa atattgctgg tttatttgga ctaaggaacc catcctgaaa
300
cctttggtct tttggccaca gttaggggtg agcggggact ggatatgcca actcctaate
360
cagtatgtaa aggataaaag tccagtttct caagaggag
399

<210> 2688

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2688

Met	Thr	Gly	Lys	Thr	Gly	Thr	Thr	Lys	Asp	Gln	Ala	Asp	Asn	Lys	Ile
1				5				10						15	
Pro	Pro	Asp	Ser	Pro	Leu	Gly	Leu	Met	Leu	Arg	Tyr	Arg	Lys	Asp	Asn
			20					25					30		
Glu	Arg	Thr	Lys	His	Lys	Lys	Arg	Gln	Gln	Met	Ile	Lys	Tyr	Cys	Trp
			35				40					45			
Phe	Ile	Trp	Thr	Lys	Glu	Pro	Ile	Leu	Lys	Pro	Leu	Val	Phe	Trp	Pro
	50					55				60					
Gln	Leu	Gly	Leu	Ser	Gly	Asp	Trp	Ile	Cys	Gln	Leu	Leu	Ile	Gln	Tyr
65					70				75					80	
Val	Lys	Asp	Lys	Ser	Pro	Val	Ser	Gln	Glu	Glu					
				85					90						

<210> 2689

<211> 560

<212> DNA

<213> Homo sapiens

<400> 2689

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gccctgtttc ctcagaaaag atacaaaaat gtgggtctca ccaagttgcc caggctggtc
120
tcaaaactct ggctcaaga aatcctctctg gttcagcctc acaaagctcc gagattacag
180

ttgcatgtct gtgacaagct tggaggccga gttgcaagct aagatccaag agagccatcc
 240
 tgaattgcga cgcgtgtact tcaataaggg attgtaaagc agggaggaaa cctctgcagc
 300
 tcattctgcc actgcaaagc tgggtgtagcc atgctggtga gaaaaatcct gttcaacctg
 360
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 420
 acgtttattg aaggcattgg tggagctctc tgtatgtgtt ttgctctgca gggaactcaa
 480
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 560

<210> 2690

<211> 73

<212> PRT

<213> Homo sapiens

<400> 2690

Ala	Pro	Ile	Gln	Val	Gly	Leu	Val	Gly	Phe	Cys	Leu	Val	Phe	Ala	Thr
1				5				10					15		
Pro	Leu	Cys	Cys	Ala	Leu	Phe	Pro	Gln	Lys	Arg	Tyr	Lys	Asn	Val	Gly
		20					25					30			
Leu	Thr	Lys	Leu	Pro	Arg	Leu	Val	Ser	Asn	Ser	Trp	Pro	Gln	Glu	Ile
	35					40					45				
Leu	Leu	Val	Gln	Pro	His	Lys	Ala	Pro	Arg	Leu	Gln	Leu	His	Val	Cys
	50					55					60				
Asp	Lys	Leu	Gly	Gly	Arg	Val	Ala	Ser							
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<210> 2691

<211> 532

<212> DNA

<213> Homo sapiens

<400> 2691

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 120
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 180
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 240
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532

<210> 2692

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2692

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Ala Tyr Ile Leu Gln Gly Val Leu Lys Ala Leu Asp Tyr Ile His His
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Met Gly Tyr Val His Arg Ser Val Lys Ala Ser His Ile Leu Ile Ser
35 40 45
Val Asp Gly Lys Val Tyr Leu Ser Gly Leu Arg Ser Asn Leu Ser Met
50 55 60
Ile Ser His Gly Gln Arg Gln Arg Val Val His Asp Phe Pro Lys Tyr
65 70 75 80
Ser Val Lys Val Leu Pro Trp Leu Ser Pro Glu Val Leu Gln Gln Asn
85 90 95
Leu Gln Gly Tyr Asp Ala Lys Ser Asp Ile Tyr Ser Val Gly Ile Thr
100 105 110
Ala Cys Glu Leu Ala Asn Gly His Val Pro Phe Lys Asp Met Pro Ala
115 120 125
Thr Gln Met Leu Leu Glu Lys Leu Asn Gly Thr Val Pro Cys Leu Leu
130 135 140
Asp Thr Ser Thr Ile Pro Ala Glu Glu Leu Thr Met Ser Pro Ser Arg
145 150 155 160
Ser Val Ala Asn Ser Gly Leu Ser Asp Ser Leu Thr Thr Ser Thr Pro
165 170 175
Arg

<210> 2693

<211> 798

<212> DNA

<213> Homo sapiens

<400> 2693

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120
aagctgcagg agttccctgt ggccatccgg accctgggca gactgcagga actgggggttc
180
cataacaaca acatcaaggc catcccagaa aaggccttca tggggaaccc tctgctacag
240
acgatacact tttatgataa cccaatccag tttgtgggaa gatcggcatt ccagtacctg
300
cctaaactcc acacactatc tctgaatggt gccatggaca tccaggagtt tccagatctc
360
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420

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 480
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 540
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 660
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 780
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 798

<210> 2694

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2694

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		20						25					30		
Glu	Thr	Leu	Asp	Leu	Asn	Tyr	Asn	Lys	Leu	Gln	Glu	Phe	Pro	Val	Ala
		35					40					45			
Ile	Arg	Thr	Leu	Gly	Arg	Leu	Gln	Glu	Leu	Gly	Phe	His	Asn	Asn	Asn
	50					55					60				
Ile	Lys	Ala	Ile	Pro	Glu	Lys	Ala	Phe	Met	Gly	Asn	Pro	Leu	Leu	Gln
65					70					75					80
Thr	Ile	His	Phe	Tyr	Asp	Asn	Pro	Ile	Gln	Phe	Val	Gly	Arg	Ser	Ala
			85					90					95		
Phe	Gln	Tyr	Leu	Pro	Lys	Leu	His	Thr	Leu	Ser	Leu	Asn	Gly	Ala	Met
			100					105					110		
Asp	Ile	Gln	Glu	Phe	Pro	Asp	Leu	Lys	Gly	Thr	Thr	Ser	Leu	Glu	Ile
	115						120					125			
Leu	Thr	Leu	Thr	Arg	Ala	Gly	Ile	Arg	Leu	Leu	Pro	Ser	Gly	Met	Cys
	130					135					140				
Gln	Gln	Leu	Pro	Arg	Leu	Arg	Val	Leu	Glu	Leu	Ser	His	Asn	Gln	Ile
145					150						155				160
Glu	Glu	Leu	Pro	Ser	Leu	His	Arg	Cys	Gln	Lys	Leu	Glu	Glu	Ile	Gly
			165						170					175	
Leu	Gln	His	Asn	Arg	Ile	Trp	Glu	Ile	Gly	Ala	Asp	Thr	Phe	Ser	Gln
			180					185					190		
Leu	Ser	Ser	Leu	Gln	Ala	Leu	Asp	Leu	Arg	Trp	Asn	Ala	Ile	Arg	Ser
	195						200					205			
Ile	His	Pro	Glu	Ala	Phe	Ser	Thr	Leu	His	Ser	Leu	Val	Lys	Leu	Asp
	210						215					220			
Leu	Thr	Asp	Asn	Gln	Leu	Thr	Thr	Leu	Pro	Leu	Ala	Gly	Leu	Gly	Gly
225				230						235					240
Leu	Met	His	Leu	Lys	Leu	Lys	Gly	Asn	Leu	Ala	Leu	Ser	Gln	Ala	Phe
			245					250						255	
Ser	Lys	Asp	Ser	Phe	Pro	Lys	Leu	Arg	Ile						

260

265

<210> 2695

<211> 2265

<212> DNA

<213> Homo sapiens

<400> 2695

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240
cctggggtag aggtgaccct gacgatgaaa gcggccagt gtagcacagg cgaccagaag
300
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420
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480
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540
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600
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660
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720
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780
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 1680
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<210> 2696

<211> 663

<212> PRT

<213> Homo sapiens

<400> 2696

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Ala	Val	Cys	Val	Leu	Gly	Thr	Leu	Thr	Gln	Leu	Asp	Ile	Cys	Ser	Ser
			20					25					30		
Ala	Pro	Glu	Asp	Cys	Thr	Ser	Phe	Ser	Ile	Asn	Ala	Ser	Pro	Gly	Val
			35					40				45			
Val	Val	Asp	Ile	Ala	His	Ser	Pro	Pro	Ala	Lys	Lys	Lys	Ser	Thr	Gly
	50					55				60					
Ser	Ser	Thr	Trp	Pro	Leu	Asp	Pro	Gly	Val	Glu	Val	Thr	Leu	Thr	Met
65					70				75					80	
Lys	Ala	Ala	Ser	Gly	Ser	Thr	Gly	Asp	Gln	Lys	Val	Gln	Ile	Ser	Tyr
			85					90					95		
Tyr	Gly	Pro	Lys	Thr	Pro	Pro	Val	Lys	Ala	Leu	Leu	Tyr	Leu	Thr	Ala
			100					105					110		
Val	Glu	Ile	Ser	Leu	Cys	Ala	Asp	Ile	Thr	Arg	Thr	Gly	Lys	Val	Lys
		115					120					125			
Pro	Thr	Arg	Ala	Val	Lys	Asp	Gln	Arg	Thr	Trp	Thr	Trp	Gly	Pro	Cys

130	135	140
Gly Gln Gly Ala Ile Leu Leu Val Asn Cys Asp Arg Asp Asn Leu Glu		
145	150	155
Ser Ser Ala Met Asp Cys Glu Asp Asp Glu Val Leu Asp Ser Glu Asp		160
	165	170
Leu Gln Asp Met Ser Leu Met Thr Leu Ser Thr Lys Thr Pro Lys Asp		175
	180	185
Phe Phe Thr Asn His Thr Leu Val Leu His Val Ala Arg Ser Glu Met		190
	195	200
Asp Lys Val Arg Val Phe Gln Ala Thr Arg Gly Lys Leu Ser Ser Lys		205
	210	215
Cys Ser Val Val Leu Gly Pro Lys Trp Pro Ser His Tyr Leu Met Val		220
225	230	235
Pro Gly Gly Lys His Asn Met Asp Phe Tyr Val Glu Ala Leu Ala Phe		240
	245	250
Pro Asp Thr Asp Phe Pro Gly Leu Ile Thr Leu Thr Ile Ser Leu Leu		255
	260	265
Asp Thr Ser Asn Leu Glu Leu Pro Glu Ala Val Val Phe Gln Asp Ser		270
	275	280
Val Val Phe Arg Val Ala Pro Trp Ile Met Thr Pro Asn Thr Gln Pro		285
	290	295
Pro Gln Glu Val Tyr Ala Cys Ser Ile Phe Glu Asn Glu Asp Phe Leu		300
305	310	315
Lys Ser Val Thr Thr Leu Ala Met Lys Ala Lys Cys Lys Leu Thr Ile		320
	325	330
Cys Pro Glu Glu Glu Asn Met Asp Asp Gln Trp Met Gln Asp Glu Met		335
	340	345
Glu Ile Gly Tyr Ile Gln Ala Pro His Lys Thr Leu Pro Val Val Phe		350
	355	360
Asp Ser Pro Arg Asn Arg Gly Leu Lys Glu Phe Pro Ile Lys Arg Val		365
	370	375
Met Gly Pro Asp Phe Gly Tyr Val Thr Arg Gly Pro Gln Thr Gly Gly		380
385	390	395
Ile Ser Gly Leu Asp Ser Phe Gly Asn Leu Glu Val Ser Pro Pro Val		400
	405	410
Thr Val Arg Gly Lys Glu Tyr Pro Leu Gly Arg Ile Leu Phe Gly Asp		415
	420	425
Ser Cys Tyr Pro Ser Asn Asp Ser Arg Gln Met His Gln Ala Leu Gln		430
	435	440
Asp Phe Leu Ser Ala Gln Gln Val Gln Ala Pro Val Lys Leu Tyr Ser		445
	450	455
Asp Trp Leu Ser Val Gly His Val Asp Glu Phe Leu Ser Phe Val Pro		460
465	470	475
Ala Pro Asp Arg Lys Gly Phe Arg Leu Leu Ala Ser Pro Arg Ser		480
	485	490
Cys Tyr Lys Leu Phe Gln Glu Gln Gln Asn Glu Gly His Gly Glu Ala		495
	500	505
Leu Leu Phe Glu Gly Ile Lys Lys Lys Lys Gln Gln Lys Ile Lys Asn		510
	515	520
Ile Leu Ser Asn Lys Thr Leu Arg Glu His Asn Ser Phe Val Glu Arg		525
	530	535
Cys Ile Asp Trp Asn Arg Glu Leu Leu Lys Arg Glu Leu Gly Leu Ala		540
545	550	555
Glu Ser Asp Ile Ile Asp Ile Pro Gln Leu Phe Lys Leu Lys Glu Phe		560

	565		570		575										
Ser	Lys	Ala	Glu	Ala	Phe	Phe	Pro	Asn	Met	Val	Asn	Met	Leu	Val	Leu
	580		585		590										
Gly	Lys	His	Leu	Gly	Ile	Pro	Lys	Pro	Phe	Gly	Pro	Val	Ile	Asn	Gly
	595		600		605										
Arg	Cys	Cys	Leu	Glu	Glu	Lys	Val	Cys	Ser	Leu	Leu	Glu	Pro	Leu	Gly
	610		615		620										
Leu	Gln	Cys	Thr	Phe	Ile	Asn	Asp	Phe	Phe	Thr	Tyr	His	Ile	Arg	His
	625		630		635									640	
Gly	Glu	Val	His	Cys	Gly	Thr	Asn	Val	Arg	Arg	Lys	Pro	Phe	Ser	Phe
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Lys	Trp	Trp	Asn	Met	Val	Pro									
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<210> 2697

<211> 2468

<212> DNA

<213> Homo sapiens

<400> 2697

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2468

<210> 2698

<211> 332

<212> PRT

<213> Homo sapiens

<400> 2698

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 Gly Arg Ala Asn His Phe Phe Thr Val Thr Asp Pro Arg Asn Ile Leu
 35 40 45
 Leu Thr Asn Glu Gln Leu Glu Ser Ala Arg Lys Ile Val His Asp Tyr
 50 55 60
 Arg Gln Gly Ile Val Pro Pro Gly Leu Thr Glu Asn Glu Leu Trp Arg
 65 70 75 80
 Ala Lys Tyr Ile Tyr Asp Ser Ala Phe His Pro Asp Thr Gly Glu Lys
 85 90 95
 Met Ile Leu Ile Gly Arg Met Ser Ala Gln Val Pro Met Asn Met Thr
 100 105 110
 Ile Thr Gly Cys Met Met Thr Phe Tyr Arg Thr Thr Pro Ala Val Leu
 115 120 125
 Phe Trp Gln Trp Ile Asn Gln Ser Phe Asn Ala Val Val Asn Tyr Thr
 130 135 140
 Asn Arg Ser Gly Asp Ala Pro Leu Thr Val Asn Glu Leu Gly Thr Ala
 145 150 155 160
 Tyr Val Ser Ala Thr Thr Gly Ala Val Ala Thr Ala Leu Gly Leu Asn
 165 170 175
 Ala Leu Thr Lys His Val Ser Pro Leu Ile Gly Arg Phe Val Pro Phe
 180 185 190
 Ala Ala Val Ala Ala Ala Asn Cys Ile Asn Ile Pro Leu Met Arg Gln
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 Arg Glu Leu Lys Val Gly Ile Pro Val Thr Asp Glu Asn Gly Asn Arg
 210 215 220
 Leu Gly Glu Ser Ala Asn Ala Ala Lys Gln Ala Ile Thr Gln Val Val
 225 230 235 240
 Val Ser Arg Ile Leu Met Ala Ala Pro Gly Met Ala Ile Pro Pro Phe
 245 250 255
 Ile Met Asn Thr Leu Glu Lys Lys Ala Phe Leu Lys Arg Phe Pro Trp
 260 265 270
 Met Ser Ala Pro Ile Gln Val Gly Leu Val Gly Phe Cys Leu Val Phe
 275 280 285
 Ala Thr Pro Leu Cys Cys Ala Leu Phe Pro Gln Lys Ser Ser Met Ser
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<210> 2699

<211> 974

<212> DNA

<213> Homo sapiens

<400> 2699

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 420
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<211> 177

<212> PRT

<213> Homo sapiens

<400> 2700

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			20					25					30		
Thr	Gln	Pro	Ala	Asp	Val	Leu	Arg	Trp	Ser	Ala	Gly	Tyr	Phe	Ser	Ala
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	50					55					60				
Val	Ala	Thr	Gln	Lys	Thr	Asp	Thr	Gly	Leu	Thr	Gln	Gly	Leu	Leu	Lys
65				70				75						80	
Val	Leu	His	Lys	Gln	Cys	His	His	Lys	Arg	Tyr	Val	Glu	Leu	Thr	Asp
			85					90					95		
Leu	Glu	Gln	Lys	Trp	Lys	Asn	Leu	Cys	Leu	Pro	Lys	Glu	Lys	Phe	Lys
			100					105					110		
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Phe Leu Ala Leu Gly Cys Ser Met Leu Gly Gly Ser Leu Asn Thr Ala
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Leu Lys His Leu Cys Glu Ile Leu Thr Asp Asp Pro Glu Ala Gly Pro
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<210> 2701

<211> 646

<212> DNA

<213> Homo sapiens

<400> 2701

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<210> 2702

<211> 92

<212> PRT

<213> Homo sapiens

<400> 2702

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20          25          30
Glu Arg Ile Ala Leu Phe Leu Gln Asn Glu Glu Phe Met Lys Glu Leu
35          40          45
Gln Arg Asn Arg Asp Phe Leu Leu Ala Leu Glu Arg Asp Arg Leu Lys
50          55          60
Tyr Glu Ser Gln Lys Ser Lys Ser Ser Ser Val Ala Val Gly Asn Asp

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1939

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 35 40 45
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<211> 337

<212> PRT

<213> Homo sapiens

<400> 2708

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			20					25					30		
Ala	Ala	Arg	Leu	Ala	Cys	Ser	Ala	Pro	Thr	Pro	Gly	Gly	Gly	Thr	Met
			35				40					45			
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Cys	Glu	Leu	Val	Gly	Leu	Asp	Ile	Gln	Asp	Glu	Met	Gly	Arg	His	Glu
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Tyr	Thr	Glu	Arg	Arg	Gln	Pro	Leu	Tyr	Arg	Phe	Ile	Thr	Thr	Ile	Cys
	290					295					300				
Ala	Ile	Ile	Gly	Gly	Thr	Phe	Thr	Val	Ala	Gly	Ile	Leu	Asp	Ser	Cys
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<211> 984

<212> DNA

<213> Homo sapiens

<400> 2709

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<211> 242

<212> PRT

<213> Homo sapiens

<400> 2710

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Thr	Ser	Ser	Lys	Asp	Asp	Lys	Gly	Ser	Thr	Ser	Ser	Thr	Ser	Gly	Ser
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Thr	Lys	Ala	Ala	Asp	Leu	Lys	Asn	Leu	Phe	Gly	Lys	Tyr	Gly	Lys	Val
		100					105						110		
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	130					135				140					
Ala	His	Leu	His	Arg	Thr	Glu	Leu	His	Gly	Gln	Leu	Ile	Ser	Val	Glu
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Arg	Ser	Ser	Lys	Thr	Gln	Ala	Ser	Val	Lys	Lys	Glu	Glu	Lys	Arg	Ser
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<210> 2711

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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1951

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 Gly Ser Pro Pro Lys Ser Lys Leu Leu Phe Ser Asn Thr Ala Ala Gln
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 Lys Leu Arg Gly Met Asp Glu Val Tyr Asn Leu Phe Tyr Val Asn Asn
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<212> PRT

<213> Homo sapiens

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<212> DNA

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 35 40 45
 Leu Asp Val Pro Leu Glu Gln Glu Met Ala Lys Glu Asp Pro Val Cys
 50 55 60
 Ala Pro Glu Ser Met Gly Ser Glu Asp Met Leu Phe Met Leu Tyr Thr
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 85 90 95
 Tyr Leu Leu Tyr Ala Ala Leu Thr His Lys Leu Val Phe Asp His Gln
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 Pro Gly Asp Ile Phe Gly Cys Val Ala Asp Ile Gly Trp Ile Thr Gly
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<211> 508

<212> PRT

<213> Homo sapiens

<400> 2722

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<211> 404

<212> PRT

<213> Homo sapiens

<400> 2724

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Leu	Ile	Arg	Gln	Tyr	Asp	Leu	Arg	Glu	Asn	Ser	Lys	His	Ser	Glu	Val
	50					55				60					
Leu	Ile	Asp	Leu	Thr	Glu	Tyr	Cys	Gly	Gln	Leu	Val	Glu	Ala	Lys	Cys

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Leu Thr Val Asn Pro Gln Asp Asn Asn Cys Leu Ala Val Gly Ala Ser
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Gly Pro Phe Val Arg Leu Tyr Asp Ile Arg Met Ile His Asn His Arg
          100          105          110
Lys Ser Met Lys Gln Ser Pro Ser Ala Gly Val His Thr Phe Cys Asp
          115          120          125
Arg Gln Lys Pro Leu Pro Asp Gly Ala Ala Gln Tyr Tyr Val Ala Gly
          130          135          140
His Leu Pro Val Lys Leu Pro Asp Tyr Asn Asn Arg Leu Arg Val Leu
145          150          155          160
Val Ala Thr Tyr Val Thr Phe Ser Pro Asn Gly Thr Glu Leu Leu Val
          165          170          175
Asn Met Gly Gly Glu Gln Val Tyr Leu Phe Asp Leu Thr Tyr Lys Gln
          180          185          190
Arg Pro Tyr Thr Phe Leu Leu Pro Arg Lys Cys His Ser Ser Gly Glu
          195          200          205
Val Gln Asn Gly Lys Met Ser Thr Asn Gly Val Ser Asn Gly Val Ser
          210          215          220
Asn Gly Leu His Leu His Ser Asn Gly Phe Arg Leu Pro Glu Ser Arg
225          230          235          240
Gly His Val Ser Pro Gln Val Glu Leu Pro Pro Tyr Leu Glu Arg Val
          245          250          255
Lys Gln Gln Ala Asn Glu Ala Phe Ala Cys Gln Gln Trp Thr Gln Ala
          260          265          270
Ile Gln Leu Tyr Ser Lys Ala Val Gln Arg Ala Pro His Asn Ala Met
          275          280          285
Leu Tyr Gly Asn Arg Ala Ala Ala Tyr Met Lys Arg Lys Trp Asp Gly
          290          295          300
Asp His Tyr Asp Ala Leu Arg Asp Cys Leu Lys Ala Ile Ser Leu Asn
305          310          315          320
Pro Cys His Leu Lys Ala His Phe Arg Leu Ala Arg Cys Leu Phe Glu
          325          330          335
Leu Lys Tyr Val Ala Glu Ala Leu Glu Cys Leu Asp Asp Phe Lys Gly
          340          345          350
Lys Phe Pro Glu Gln Ala His Ser Ser Ala Cys Asp Ala Leu Gly Arg
          355          360          365
Asp Ile Thr Ala Ala Leu Phe Ser Lys Asn Asp Gly Glu Glu Lys Lys
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<210> 2725

<211> 856

<212> DNA

<213> Homo sapiens

<400> 2725

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120

aaggttctta aagaagtcag ggtgcaggat gagaacaacg tttgttttga gtgtggcgcg
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<210> 2726

<211> 148

<212> PRT

<213> Homo sapiens

<400> 2726

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Asp	Glu	Asn	Asn	Val	Cys	Phe	Glu	Cys	Gly	Ala	Phe	Asn	Pro	Gln	Trp
		20					25					30			
Val	Ser	Val	Thr	Tyr	Gly	Ile	Trp	Ile	Cys	Leu	Glu	Cys	Ser	Gly	Arg
		35				40					45				
His	Arg	Gly	Leu	Gly	Val	His	Leu	Ser	Phe	Val	Arg	Ser	Val	Thr	Met
	50					55				60					
Asp	Lys	Trp	Lys	Asp	Ile	Glu	Leu	Glu	Lys	Met	Lys	Ala	Gly	Gly	Asn
65				70					75				80		
Ala	Lys	Phe	Arg	Glu	Phe	Leu	Glu	Ser	Gln	Glu	Asp	Tyr	Asp	Pro	Cys
			85					90					95		
Trp	Ser	Leu	Gln	Glu	Lys	Tyr	Asn	Ser	Arg	Ala	Ala	Ala	Leu	Phe	Arg
		100					105						110		
Asp	Lys	Val	Val	Ala	Leu	Ala	Glu	Gly	Arg	Glu	Trp	Ser	Leu	Glu	Ser
		115				120					125				
Ser	Pro	Ala	Gln	Asn	Trp	Thr	Pro	Pro	Gln	Pro	Arg	Thr	Leu	Pro	Ser
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Met	Val	His	Arg												
145															

<210> 2727
 <211> 1119
 <212> DNA
 <213> Homo sapiens

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<210> 2728
 <211> 221
 <212> PRT
 <213> Homo sapiens

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<212> DNA
<213> Homo sapiens
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<210> 2730
<211> 92
<212> PRT
<213> Homo sapiens
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1970


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      20           25           30
Leu Asp Gln Cys Ala Glu Asp Phe Arg Glu Pro Pro His Phe Pro Cys
      35           40           45
Leu Gln Lys Leu Leu Asp Tyr Leu Thr Arg Met Met Pro Gly Ser Asp
      50           55           60
Pro Glu Arg Arg Ala Gln Asn Leu Leu Glu Gln Phe Gln Lys Gln Glu
      65           70           75           80
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<210> 2731

<211> 447

<212> DNA

<213> Homo sapiens

<400> 2731

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aacggccagc gcgtgtacac gagcatgtcc gactgcctca tcaagaccgt ccgctccgag
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<210> 2732

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2732

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Ile Gly Val Thr Cys Val Phe Pro Ile Asp Leu Ala Lys Thr Arg Leu
      20           25           30
Gln Asn Gln Gln Asn Gly Gln Arg Val Tyr Thr Ser Met Ser Asp Cys
      35           40           45
Leu Ile Lys Thr Val Arg Ser Glu Gly Tyr Phe Gly Met Tyr Arg Gly
      50           55           60
Ala Ala Val Asn Leu Thr Leu Val Thr Pro Glu Lys Ala Ile Lys Leu
      65           70           75           80
Ala Ala Asn Asp Phe Phe Arg His Gln Leu Ser Lys Asp Gly Gln Lys
      85           90           95
Leu Thr Leu Leu Lys Glu Met Leu Ala Gly Cys Gly Ala Gly Thr Cys

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<210> 2733

<211> 3619

<212> DNA

<213> Homo sapiens

<400> 2733

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<211> 790

<212> PRT

<213> Homo sapiens

<400> 2734

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	20						25					30			
Val	Met	Asp	Lys	Leu	Arg	Leu	Ala	Glu	Leu	Thr	Val	Asp	Glu	Phe	Leu
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Gln	Ala	Glu	Thr	Arg	Glu	Ala	Arg	Glu	Ala	Ala	Arg	Ser	Pro	Asp	Lys
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Pro	Gly	Gly	Ser	Pro	Ser	Ala	Ser	Arg	Arg	Lys	Gly	Arg	Ala	Ser	Glu
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His	Lys	Asp	Gln	Leu	Ser	Arg	Leu	Lys	Asp	Arg	Asp	Pro	Glu	Phe	Tyr
		100					105					110			
Lys	Phe	Leu	Gln	Glu	Asn	Asp	Gln	Ser	Leu	Leu	Asn	Phe	Ser	Asp	Ser
	115					120					125				
Asp	Ser	Ser	Glu	Glu	Glu	Glu	Gly	Pro	Phe	His	Ser	Leu	Pro	Asp	Val
	130				135						140				
Leu	Glu	Glu	Ala	Ser	Glu	Glu	Glu	Asp	Gly	Ala	Glu	Glu	Gly	Glu	Asp
145			150					155						160	
Gly	Asp	Arg	Val	Pro	Arg	Gly	Leu	Lys	Gly	Lys	Lys	Asn	Ser	Val	Pro
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1975

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Thr Pro Leu Thr Leu Tyr Tyr Ser His Trp Arg Lys Leu Arg Asp Arg		640
	645	650
Glu Ile Gln Leu Glu Ile Ser Gly Lys Glu Arg Val Arg Leu Gly Glu		655
	660	665
Gly Thr Trp Leu Glu Asp Leu Asn Phe Pro Glu Ile Lys Arg Arg Lys		670
	675	680
Met Ala Asp Arg Lys Asp Glu Asp Arg Lys Gln Phe Lys Asp Leu Phe		685
	690	695
Asp Leu Asn Ser Ser Glu Glu Asp Asp Thr Glu Gly Phe Leu Glu Arg		700
705	710	715
Gly Ile Leu Gly Pro Leu Ser Thr Arg His Gly Val Glu Asp Asp Glu		720
	725	730
Glu Asp Glu Glu Gly Glu Glu Asp Ser Ser Asn Ser Glu Gly Glu		735
	740	745
Trp Ser Trp Asp Gly Asp Pro Asp Ala Glu Ala Gly Leu Ala Pro Gly		750
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<210> 2735

<211> 1666

<212> DNA

<213> Homo sapiens

<400> 2735

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720

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<210> 2736

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2736

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		20						25					30		
Phe	His	Ser	Ser	His	Ile	Ser	Thr	Ile	Gly	Val	Asp	Phe	Lys	Met	Lys
		35					40					45			
Thr	Ile	Glu	Val	Asp	Gly	Ile	Lys	Val	Arg	Ile	Gln	Ile	Trp	Asp	Thr
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Ala	Gly	Gln	Glu	Arg	Tyr	Gln	Thr	Ile	Thr	Lys	Gln	Tyr	Tyr	Arg	Arg
65				70					75					80	
Ala	Gln	Gly	Ile	Phe	Leu	Val	Tyr	Asp	Ile	Ser	Ser	Glu	Arg	Ser	Tyr
			85					90					95		
Gln	His	Ile	Met	Lys	Trp	Val	Ser	Asp	Val	Asp	Glu	Tyr	Ala	Pro	Glu
		100					105						110		
Gly	Val	Gln	Lys	Ile	Leu	Ile	Gly	Asn	Lys	Ala	Asp	Glu	Glu	Gln	Lys

115	120	125
Arg Gln Val Gly Arg Glu Gln Gly Gln Gln Lys Cys Pro Ser Leu Gln		
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Leu Ala Lys Glu Tyr Gly Met Asp Phe Tyr Glu Thr Ser Ala Cys Thr		
145	150	155
Asn Leu Asn Ile Lys Glu Ser Phe Thr Arg Leu Thr Glu Leu Val Leu		
165	170	175
Gln Ala His Arg Lys Glu Leu Glu Gly Leu Arg Met Arg Ala Ser Asn		
180	185	190
Glu Leu Ala Leu Ala Glu Leu Glu Glu Glu Glu Gly Lys Pro Glu Gly		
195	200	205
Pro Ala Asn Ser Ser Lys Thr Cys Trp Cys		
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<210> 2737

<211> 898

<212> DNA

<213> Homo sapiens

<400> 2737

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<210> 2738

<211> 299

<212> PRT

<213> Homo sapiens

<400> 2738

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 Ile Val Asp Gln Cys Glu Arg Leu Gln Leu Gln Ser Ala Ala Ile Thr
 35 40 45
 Lys Tyr Val Ala Asp Val Leu Pro Gly Lys Asn Gln Arg Ala Val Ser
 50 55 60
 Met Ala Ser Ala Ala Arg Glu Leu Val Ile Gln Arg Leu Ser Leu Val
 65 70 75 80
 Arg Ser Leu Cys Glu Ser Glu Glu Gln Arg Leu Leu Glu Gln Val His
 85 90 95
 Gly Glu Glu Glu Arg Ala His Gln Ser Ile Leu Thr Gln Arg Val His
 100 105 110
 Trp Ala Glu Ala Leu Gln Lys Leu Asp Thr Ile Arg Thr Gly Leu Val
 115 120 125
 Gly Met Leu Thr His Leu Asp Asp Leu Gln Leu Ile Gln Lys Glu Gln
 130 135 140
 Glu Ile Phe Glu Arg Thr Glu Glu Ala Glu Gly Ile Leu Asp Pro Gln
 145 150 155 160
 Glu Ser Glu Met Leu Asn Phe Asn Glu Lys Cys Thr Arg Ser Pro Leu
 165 170 175
 Leu Thr Gln Leu Trp Ala Thr Ala Val Leu Gly Ser Leu Ser Gly Thr
 180 185 190
 Glu Asp Ile Arg Ile Asp Glu Arg Thr Val Ser Pro Phe Leu Gln Leu
 195 200 205
 Ser Asp Asp Arg Lys Thr Leu Thr Ser Ala Pro Arg Ser Gln Arg Cys
 210 215 220
 Ala Asp Gly Pro Glu Arg Phe Asp His Trp Pro Asn Ala Leu Ala Ala
 225 230 235 240
 Thr Ser Phe Gln Asn Gly Leu His Ala Trp Met Val Asn Val Gln Asn
 245 250 255
 Ser Cys Ala Tyr Lys Val Gly Val Ala Ser Gly His Leu Pro Arg Lys
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 Gly Ser Gly Ser Asp Cys Arg Leu Gly His Asn Ala Phe Ser Trp Val
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<210> 2739

<211> 1501

<212> DNA

<213> Homo sapiens

<400> 2739

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 180

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<210> 2740

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2740

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180
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240
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300
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600

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 720
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 780
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 1380
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<210> 2742

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2742

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 Tyr Arg Asp Asp Leu Asp Leu Gln Asn Leu Ile Asp Phe Gly Gln Lys
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 Lys Phe Ser Cys Cys Gly Gly Ile Ser Tyr Lys Asp Trp Ser Gln Asn
 35 40 45
 Met Tyr Phe Asn Cys Ser Glu Asp Asn Pro Ser Arg Glu Arg Cys Ser
 50 55 60
 Val Pro Tyr Ser Cys Cys Leu Pro Thr Pro Asp Gln Ala Val Ile Asn
 65 70 75 80
 Thr Met Cys Gly Gln Gly Met Gln Ala Phe Asp Tyr Leu Glu Ala Ser
 85 90 95
 Lys Val Ile Tyr Thr Asn Gly Cys Ile Asp Lys Leu Val Asn Trp Ile
 100 105 110
 His Ser Asn Leu Phe Leu Leu Gly Gly Val Ala Leu Gly Leu Ala Ile
 115 120 125
 Pro Gln Leu Val Gly Ile Leu Leu Ser Gln Ile Leu Val Asn Gln Ile

130 135 140
 Lys Asp Gln Ile Lys Leu Gln Leu Tyr Asn Gln Gln His Arg Ala Asp
 145 150 155 160
 Pro Trp Tyr

<210> 2743
 <211> 384
 <212> DNA
 <213> Homo sapiens

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 180
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 240
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<210> 2744
 <211> 69
 <212> PRT
 <213> Homo sapiens

<400> 2744
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 Asp Trp Ser Val Pro Ser Pro Pro Thr Ala Ser Gln Asp Ser Gly Val
 35 40 45
 Gln Ser Pro Pro Gly Ala Ser Arg Asp Trp Ser Val Pro Ser Pro Pro
 50 55 60
 Arg Ala Tyr Gln Asp
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<210> 2745
 <211> 769
 <212> DNA
 <213> Homo sapiens

<400> 2745
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 120

agtatcacct gagaaaatta ggcattcccg tcttggaac acgtctctgt gagtttgc
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 240
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 420
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 480
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 660
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<210> 2746

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2746

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 20 25 30
 Ser Gly Glu Lys Leu Pro Asp Gln Pro Phe Thr His His Ser Gln Glu
 35 40 45
 Gly Pro Phe Pro Pro Gly Arg Glu Thr Ser Arg Pro Ala Pro His Thr
 50 55 60
 Thr Ala Lys Arg Gly Leu Ser His Leu Glu Arg Asn Phe Gln Thr Ser
 65 70 75 80
 Pro Ser His His Ser Gln Glu Gly Pro Phe Pro Pro Gly Glu Lys Leu
 85 90 95
 Pro Asp

<210> 2747

<211> 1100

<212> DNA

<213> Homo sapiens

<400> 2747

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 180
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 240
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<210> 2748

<211> 205

<212> PRT

<213> Homo sapiens

<400> 2748

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 35 40 45
 Gly Cys Phe Ala Cys Val Ser Lys Pro Pro Ala Leu Gln Ala Pro Ala
 50 55 60
 Ala Pro Ala Pro Glu Pro Ser Ala Ser Pro Pro Met Ala Pro Thr Leu
 65 70 75 80
 Phe Pro Met Glu Ser Lys Ser Ser Lys Thr Asp Ser Val Arg Ala Ala
 85 90 95
 Gly Ala Pro Pro Ala Cys Lys His Leu Ala Glu Lys Lys Thr Met Thr

100	105	110
Asn Pro Thr Thr Val Ile Glu Val Tyr Pro Asp Thr Thr Glu Val Asn		
115	120	125
Asp Tyr Tyr Leu Trp Ser Ile Phe Asn Phe Val Tyr Leu Asn Phe Cys		
130	135	140
Cys Leu Gly Phe Ile Ala Leu Ala Tyr Ser Leu Lys Val Arg Asp Lys		
145	150	155
Lys Leu Leu Asn Asp Leu Asn Gly Ala Val Glu Asp Ala Lys Thr Ala		
165	170	175
Arg Leu Phe Asn Ile Thr Ser Ser Ala Leu Ala Ala Ser Cys Ile Ile		
180	185	190
Leu Val Phe Ile Phe Leu Arg Tyr Pro Leu Thr Asp Tyr		
195	200	205

<210> 2749

<211> 2050

<212> DNA

<213> Homo sapiens

<400> 2749

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1020

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<210> 2750

<211> 332

<212> PRT

<213> Homo sapiens

<400> 2750

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			20					25					30		
Ile	Cys	Thr	Arg	Thr	Val	Gln	His	Gln	Asp	Ser	Gln	Val	Asn	Ala	Leu
			35				40					45			
Glu	Val	Thr	Pro	Asp	Arg	Ser	Met	Ile	Ala	Ala	Ala	Val	Gln	Pro	Val
			50				55					60			
Ser	Leu	Gly	Tyr	Gln	His	Ile	Arg	Met	Tyr	Asp	Leu	Asn	Ser	Asn	Asn
65					70					75				80	
Pro	Asn	Pro	Ile	Ile	Ser	Tyr	Asp	Gly	Val	Asn	Lys	Asn	Ile	Ala	Ser

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480
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<212> PRT

<213> Homo sapiens

<400> 2752

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<212> DNA

<213> Homo sapiens

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Cys His Thr Val Val Pro Glu Lys Asp Gly Asp Asn Ile Ile Tyr Gln
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Ala Ser Ser Pro Asp Glu Ala Ala Leu Val Lys Gly Ala Lys Lys Leu
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Gly Phe Val Phe Thr Ala Arg Thr Pro Phe Ser Val Ile Ile Glu Ala
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Ser Asp Arg Lys Arg Met Ser Val Ile Val Arg Thr Pro Ser Gly Arg
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Leu Arg Leu Tyr Cys Lys Gly Ala Asp Asn Val Ile Phe Glu Arg Leu
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Ser Lys Asp Ser Lys Tyr Met Glu Glu Thr Leu Cys His Leu Glu Tyr
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Phe Ala Thr Glu Gly Leu Arg Thr Leu Cys Val Ala Tyr Ala Asp Leu
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Ser Glu Gly Asn Glu Tyr Glu Glu Trp Leu Lys Val Tyr Gln Glu Ala
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Ser Thr Ile Leu Lys Asp Arg Ala Gln Arg Leu Glu Glu Cys Tyr Glu
195          200          205
Ile Ile Glu Lys Asn Leu Leu Leu Leu Gly Ala Thr Ala Ile Glu Asp
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Arg Leu Gln Ala Gly Val Pro Glu Thr Ile Ala Thr Leu Leu Lys Ala
225          230          235          240
Glu Ile Lys Ile Trp Val Leu Thr Gly Asp Lys Gln Glu Thr Ala Ile
245          250          255
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Leu Leu Lys Gly Asp Ser Leu Asp Ala Thr Arg Ala Ala Ile Thr Gln
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<211> 4795

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 2756

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Ser Phe Tyr Met Ser Ser Pro Gly Pro Ser Glu Tyr Cys Pro Ser Glu
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Arg Thr Ile Ser Glu Ile
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<210> 2757
 <211> 449
 <212> DNA
 <213> Homo sapiens

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<400> 2757
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ggttttaata gttttcagat gcttcaagtg ttgtgaacag agacttggtt ggattatgca
180
tttctcagct agactaaata aatgctagca atggatacgt gcaaacaatgt tgggcagctg
240
cagcttgctc aagaccattc cagcctcaac cctcagaaat ggcaactgtgt ggactgcaac
300
acgaccgagt ccatttgggc ttgccttagc tgctcccatg ttgcctgtgg aagatatatt
360
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420
gagatgtacg tttttgtta cctttgtga
449

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<210> 2758
 <211> 82
 <212> PRT
 <213> Homo sapiens

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<400> 2758
Met Leu Ala Met Asp Thr Cys Lys His Val Gly Gln Leu Gln Leu Ala
1          5          10          15
Gln Asp His Ser Ser Leu Asn Pro Gln Lys Trp His Cys Val Asp Cys
20          25          30
Asn Thr Thr Glu Ser Ile Trp Ala Cys Leu Ser Cys Ser His Val Ala
35          40          45
Cys Gly Arg Tyr Ile Glu Glu His Ala Leu Lys His Phe Gln Glu Ser

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50 55 60
 Ser His Pro Val Ala Leu Glu Val Asn Glu Met Tyr Val Phe Cys Tyr
 65 70 75 80
 Leu Cys

<210> 2759
 <211> 688
 <212> DNA
 <213> Homo sapiens

<400> 2759
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 180
 ccccggcagc ccgcagcccc tgagacctca gccctgtca acagtgggga cccaccacc
 240
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 300
 gccagttttt ccaaatagacc tgtaccctac ccagtaccct gctccccctt tcccataatt
 360
 catgacatca aaacatcage ttttcacett ttccttgaga ctcaggaggg ccaaagcaac
 420
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 480
 ccatccttac tgttcagaga cagcaactcc ctcccgtaac tcaggctgag aaggaaccag
 540
 ccagctctta cctcctcctg gttgcttttc ttgccccac cccaagtta tttttgtttt
 600
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 660
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 688

<210> 2760
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 2760
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 Gly Gly Asp Gly Glu Thr Lys Pro Ser Gln Gly Pro Ala Asp Gly Ser
 20 25 30
 Arg Pro Glu Pro Gln Arg Pro Arg Asn Arg Pro Tyr Phe Gln Arg Arg
 35 40 45
 Arg Gln Gln Ala Pro Gly Pro Gln Gln Ala Pro Gly Pro Arg Gln Pro
 50 55 60
 Ala Ala Pro Glu Thr Ser Ala Pro Val Asn Ser Gly Asp Pro Thr Thr
 65 70 75 80
 Thr Ile Leu Glu

<210> 2761
 <211> 922
 <212> DNA
 <213> Homo sapiens

<400> 2761
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 120
 ccataactg agggcaataa agagccagat aagacctggg tgaaaaagg agagcccctc
 180
 ccggtaaaac tgaactcttc tacagaagca aatgtgatta aagaggctct agactcctct
 240
 ttggaatcta ctctggacaa cagctgtcaa ggtgcacaaa tggataataa atctgaagtt
 300
 cagttgtggc tgtaaagag aattcaggt cccattgaag atatacttcc ttcaaaagaa
 360
 gaaaaaagca agaccccacc catgttcctg tgcataaag tgggaaaacc aatgagaaaa
 420
 tcctttgcc ctcacactgc agccatggtc cagcagtacg gcaaacggag aaagcagcca
 480
 gagtactggt ttgctgttcc tcgggagagg gtggatcatt tgtacacatt ctttgttcag
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 660
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 720
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 780
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<210> 2762
 <211> 307
 <212> PRT
 <213> Homo sapiens

<400> 2762
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 20 25 30
 Ser Ser Leu Ser Gln Ala Gly Asp Pro Ile Thr Glu Gly Asn Lys Glu
 35 40 45
 Pro Asp Lys Thr Trp Val Lys Lys Gly Glu Pro Leu Pro Val Lys Leu

50 55 60
 Asn Ser Ser Thr Glu Ala Asn Val Ile Lys Glu Ala Leu Asp Ser Ser
 65 70 75 80
 Leu Glu Ser Thr Leu Asp Asn Ser Cys Gln Gly Ala Gln Met Asp Asn
 85 90 95
 Lys Ser Glu Val Gln Leu Trp Leu Leu Lys Arg Ile Gln Val Pro Ile
 100 105 110
 Glu Asp Ile Leu Pro Ser Lys Glu Lys Ser Lys Thr Pro Pro Met
 115 120 125
 Phe Leu Cys Ile Lys Val Gly Lys Pro Met Arg Lys Ser Phe Ala Thr
 130 135 140
 His Thr Ala Ala Met Val Gln Gln Tyr Gly Lys Arg Arg Lys Gln Pro
 145 150 155 160
 Glu Tyr Trp Phe Ala Val Pro Arg Glu Arg Val Asp His Leu Tyr Thr
 165 170 175
 Phe Phe Val Gln Trp Ser Pro Asp Val Tyr Gly Lys Asp Ala Lys Glu
 180 185 190
 Gln Gly Phe Val Val Val Glu Lys Glu Glu Leu Asn Met Ile Asp Asn
 195 200 205
 Phe Phe Ser Glu Pro Thr Thr Lys Ser Trp Glu Ile Ile Thr Val Glu
 210 215 220
 Glu Ala Lys Arg Arg Lys Ser Thr Cys Ser Tyr Tyr Glu Asp Glu Asp
 225 230 235 240
 Glu Glu Val Leu Pro Val Leu Arg Pro Pro Arg Ala Phe Trp Glu Asn
 245 250 255
 Lys Pro Leu Asn Arg Trp Ala Arg Pro Phe Pro Ala Arg Val Gln Gly
 260 265 270
 Tyr Pro Trp Arg Leu Ala Tyr Ser Thr Leu Glu His Gly Thr Ser Leu
 275 280 285
 Lys Thr Leu Tyr Arg Lys Ser Ala Ser Leu Asp Ser Pro Val Leu Leu
 290 295 300
 Val Ile Lys
 305

<210> 2763

<211> 2210

<212> DNA

<213> Homo sapiens

<400> 2763

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 120
 caaacagtcc agtctctgcag accacacagg gtacatctag aggggtctac ttgcatcacc
 180
 cacacttcca ctctgtgaa acaactgtct tgggcatgag aagggccagg ataggccagg
 240
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 300
 gtccctgcag gaagatgcta ataggtacaa caggtagaac atgtagacac aaacatctag
 360
 tttatttttt ctgactgtaa ccaaagtcag caaaagaaac aacaaaactt cagtgcctta
 420

gaaatcctcc tggattcaat gacaacacat caatggccgg gcacaggggt ggattccttt
480
tatgaaatca ccttataatc tctcatcatc ccaggacagt gccttttggg actgcatgaa
540
tctttaatag ctacaccaca ttttctcatc cttaagtta tgacagacag gttatctctc
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tccaagagca tcagggttaga tgctctttca ctcttacaaa ctgtcagggtg gagggagaat
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cacgacatca ttcataaata actgtggagt ctgggatgct ggctgaaggc atctccagga
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780
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1260
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1980
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2040

tctgttcagg gcctctgacc ttctttctgc ccccaaccac tggcccagaa gctactgacc
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 2210

<210> 2764

<211> 423

<212> PRT

<213> Homo sapiens

<400> 2764

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Gly	Val	Ile	Asp	Pro	Gly	Met	Glu	Tyr	Val	Pro	Pro	Pro	Ala	Gly	Ser
		20					25					30			
Val	Ala	Ser	Gly	Pro	Val	Val	Gly	Gly	Arg	Lys	Lys	Val	Arg	Gly	Pro
	35					40					45				
Glu	Gln	Ile	Lys	Gln	Glu	Val	Glu	Ser	Glu	Glu	Glu	Lys	Pro	Asp	Arg
	50				55					60					
Met	Asp	Ile	Asp	Ser	Glu	Asp	Thr	Asp	Ser	Asn	Thr	Ser	Leu	Gln	Thr
65				70					75				80		
Arg	Ala	Arg	Glu	Lys	Arg	Lys	Pro	Gln	Leu	Glu	Lys	Asp	Thr	Lys	Pro
			85					90					95		
Lys	Glu	Pro	Arg	Tyr	Thr	Pro	Val	Ser	Ile	Tyr	Glu	Glu	Lys	Leu	Leu
	100						105					110			
Leu	Lys	Arg	Leu	Glu	Ala	Cys	Pro	Gly	Ala	Val	Ala	Met	Thr	Pro	Glu
	115					120					125				
Ala	Arg	Arg	Leu	Lys	Arg	Lys	Leu	Ile	Val	Arg	Gln	Ala	Lys	Arg	Asp
	130					135				140					
Arg	Gly	Leu	Pro	Leu	Phe	Asp	Leu	Asp	Gln	Val	Val	Asn	Ala	Ala	Leu
145				150					155					160	
Leu	Leu	Val	Asp	Gly	Ile	Tyr	Gly	Ala	Lys	Glu	Gly	Gly	Ile	Ser	Arg
		165					170						175		
Leu	Pro	Ala	Gly	Gln	Ala	Thr	Tyr	Arg	Thr	Thr	Cys	Gln	Asp	Phe	Arg
	180						185					190			
Ile	Leu	Asp	Arg	Tyr	Gln	Thr	Ser	Leu	Pro	Ser	Arg	Lys	Gly	Phe	Arg
	195					200						205			
His	Gln	Thr	Thr	Lys	Phe	Leu	Tyr	Arg	Leu	Val	Gly	Ser	Glu	Asp	Met
	210					215					220				
Ala	Val	Asp	Gln	Ser	Ile	Val	Ser	Pro	Tyr	Thr	Ser	Arg	Ile	Leu	Lys
225				230						235				240	
Pro	Tyr	Ile	Arg	Arg	Asp	Tyr	Glu	Thr	Lys	Pro	Pro	Lys	Leu	Gln	Leu
			245					250					255		
Leu	Ser	Gln	Ile	Arg	Ser	His	Leu	His	Arg	Ser	Asp	Pro	His	Trp	Thr
	260						265					270			
Pro	Glu	Pro	Asp	Ala	Pro	Leu	Asp	Tyr	Cys	Tyr	Val	Arg	Pro	Asn	His
	275					280						285			
Ile	Pro	Thr	Ile	Asn	Ser	Met	Cys	Gln	Glu	Phe	Phe	Trp	Pro	Gly	Ile
	290					295				300					
Asp	Leu	Ser	Glu	Cys	Leu	Gln	Tyr	Pro	Asp	Phe	Ser	Val	Val	Val	Leu
305				310						315				320	
Tyr	Lys	Lys	Val	Ile	Ile	Ala	Phe	Gly	Phe	Met	Val	Pro	Asp	Val	Lys

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          325          330          335
Tyr Asn Glu Ala Tyr Ile Ser Phe Leu Phe Val His Pro Glu Trp Arg
          340          345          350
Arg Ala Gly Ile Ala Thr Phe Met Ile Tyr His Leu Ile Gln Thr Cys
          355          360          365
Met Gly Lys Asp Val Thr Leu His Val Ser Ala Ser Asn Pro Ala Met
          370          375          380
Leu Leu Tyr Gln Lys Phe Gly Phe Lys Thr Glu Glu Tyr Val Leu Asp
385          390          395          400
Phe Tyr Asp Lys Tyr Tyr Pro Leu Glu Ser Thr Glu Cys Lys His Ala
          405          410          415
Phe Phe Leu Arg Leu Arg Arg
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<210> 2765

<211> 582

<212> DNA

<213> Homo sapiens

<400> 2765

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180
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300
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480
ggcacagttg cagtcggcct gcaggtcaag gtcacagcgg gcggccagcg ccccatccac
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582

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<210> 2766

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2766

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Met Gly Arg Trp Pro Pro Ala Val Thr Leu Thr Cys Arg Pro Thr Ala
1          5          10          15
Thr Val Pro Trp Ser Pro Gly Thr Thr Ser Ala Glu Thr Thr Ala Leu
20          25          30
Ala Arg Ser Leu Cys Ser Ala Gly Thr Gln Pro Ala Pro Ser Thr Thr
35          40          45
Ser Leu Pro Ser Trp Arg Ser Ala Ala Pro Leu Ala Trp Pro Leu Gln

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50		55		60	
Leu Ser Gly Gln Trp	Trp Ser Ala Gly Ala Cys	Phe Leu Asp Leu Pro			
65	70	75	80		
Ser Leu Ala Leu Cys Trp	Pro Gly Asp Ser Gly Asp	Ala Glu Trp Pro			
	85	90	95		
Glu Ala Gly Ser					
100					

<210> 2767

<211> 1202

<212> DNA

<213> Homo sapiens

<400> 2767

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120
gactcagcct acgacagcaa cgaccctgat gtggaatcca acagcagcag tggcatcagc
180
tctcccagca ggcagcccca ggtgcccattg gccacagctg ctggcttgga tagcgcgggc
240
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300
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420
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720
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780
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960
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1020
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1080
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ag

1202

<210> 2768

<211> 282

<212> PRT

<213> Homo sapiens

<400> 2768

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      20          25          30
Ser Leu Ala Gln Pro Asp Arg Arg Tyr Ser Glu Pro Ser Met Pro Ser
      35          40          45
Ser Gln Glu Cys Leu Glu Ser Arg Val Thr Asn Gln Thr Leu Thr Lys
      50          55          60
Ser Glu Gly Asp Phe Pro Val Pro Arg Val Gly Ser Arg Leu Glu Ser
65          70          75          80
Glu Glu Ala Glu Asp Pro Phe Pro Glu Glu Val Phe Pro Ala Val Gln
      85          90          95
Gly Lys Thr Lys Arg Pro Val Asp Leu Lys Ile Lys Asn Leu Ala Pro
      100          105          110
Gly Ser Val Leu Pro Arg Ala Leu Val Leu Lys Ala Phe Ser Ser Ser
      115          120          125
Ser Leu Asp Ala Ser Ser Asp Ser Ser Pro Val Ala Ser Pro Ser Ser
      130          135          140
Pro Lys Arg Asn Phe Phe Ser Arg His Gln Ser Phe Thr Thr Lys Thr
145          150          155          160
Glu Lys Gly Lys Pro Ser Arg Glu Ile Lys Lys His Ser Met Ser Phe
      165          170          175
Thr Phe Ala Pro His Lys Lys Val Leu Thr Lys Asn Leu Ser Ala Gly
      180          185          190
Ser Gly Lys Ser Gln Asp Phe Thr Arg Asp His Val Pro Arg Gly Val
      195          200          205
Arg Lys Glu Ser Gln Leu Ala Gly Arg Ile Val Gln Glu Asn Gly Cys
      210          215          220
Glu Thr His Asn Gln Thr Ala Arg Gly Phe Cys Leu Arg Pro His Ala
225          230          235          240
Leu Ser Val Asp Asp Val Phe Gln Gly Ala Asp Trp Glu Arg Pro Gly
      245          250          255
Ser Pro Pro Ser Tyr Glu Glu Ala Met Gln Gly Pro Ala Ala Arg Leu
      260          265          270
Val Ala Ser Gln Gln Phe Gln Phe Leu Ala
      275          280

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<210> 2769

<211> 1286

<212> DNA

<213> Homo sapiens

<400> 2769

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 180
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 420
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 480
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 aaggtgctca aggtgagga tgacgcctac accaccttca tcagtgaac gggcaagatc
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 1286

<210> 2770

<211> 228

<212> PRT

<213> Homo sapiens

<400> 2770

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 Asn Arg Ile Arg Val Arg Gln Asp Leu Ala Ser Leu Pro Ala Glu Leu

35 40 45
 Ile Asn Gln Ile Gly Asn Arg Cys His Pro Lys Leu Tyr Asp Glu Gly
 50 55 60
 Asp Pro Ser Glu Lys Leu Glu Leu Val Thr Gly Thr Asn Val Tyr Ile
 65 70 75 80
 Thr Arg Ala Gln Leu Met Asn Cys His Val Ser Ala Gly Thr Arg His
 85 90 95
 Lys Val Leu Leu Arg Arg Leu Leu Ala Ser Phe Phe Asp Arg Asn Thr
 100 105 110
 Leu Ala Asn Ser Cys Gly Thr Gly Ile Arg Ser Ser Thr Asn Asp Pro
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<212> DNA

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<212> PRT

<213> Homo sapiens

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<400> 2774

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<212> PRT

<213> Homo sapiens

<400> 2776

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<212> DNA

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 aaaaaaaaa
 1268

<210> 2782

<211> 314

<212> PRT

<213> Homo sapiens

<400> 2782

Val	Asp	Gly	Leu	Gln	Glu	Val	Gln	Arg	Gln	Ala	Gln	Glu	Gly	Lys	Asn
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			20					25					30		
Ala	Arg	Thr	Gly	Leu	Arg	Ile	Cys	Asp	Leu	Leu	Ser	Asp	Phe	Asp	Glu
			35				40					45			
Phe	Ser	Ser	Arg	Phe	Lys	Asn	Leu	Ala	His	Gln	His	Gln	Ser	Met	Phe
	50					55					60				
Pro	Thr	Leu	Glu	Ile	Asp	Ile	Glu	Gly	Gln	Leu	Lys	Arg	Leu	Lys	Gly
65					70				75					80	
Phe	Ala	Glu	Arg	Ile	Arg	Pro	Met	Val	Arg	Asp	Gly	Val	Tyr	Phe	Met
			85					90						95	
Tyr	Glu	Ala	Leu	His	Gly	Pro	Pro	Lys	Lys	Ile	Leu	Val	Glu	Gly	Ala
			100					105					110		
Asn	Ala	Ala	Leu	Leu	Asp	Ile	Asp	Phe	Gly	Thr	Tyr	Pro	Phe	Val	Thr
			115				120					125			
Ser	Ser	Asn	Cys	Thr	Val	Gly	Gly	Val	Cys	Thr	Gly	Leu	Gly	Ile	Pro
			130				135				140				
Pro	Gln	Asn	Ile	Gly	Asp	Val	Tyr	Gly	Val	Val	Lys	Ala	Tyr	Thr	Thr
145					150				155					160	
Arg	Val	Gly	Ile	Gly	Ala	Phe	Pro	Thr	Glu	Gln	Ile	Asn	Glu	Ile	Gly
			165					170						175	
Gly	Leu	Leu	Gln	Thr	Arg	Gly	His	Glu	Trp	Gly	Val	Thr	Thr	Gly	Arg
			180					185					190		
Lys	Arg	Arg	Cys	Gly	Trp	Leu	Asp	Leu	Met	Ile	Leu	Arg	Tyr	Ala	His
			195				200					205			
Met	Val	Asn	Gly	Phe	Thr	Ala	Leu	Ala	Leu	Thr	Lys	Leu	Asp	Ile	Leu
			210			215					220				
Asp	Val	Leu	Gly	Glu	Val	Lys	Val	Gly	Val	Ser	Tyr	Lys	Leu	Asn	Gly
225					230				235					240	
Lys	Arg	Ile	Pro	Tyr	Phe	Pro	Ala	Asn	Gln	Glu	Met	Leu	Gln	Lys	Val
			245					250						255	
Glu	Val	Glu	Tyr	Glu	Thr	Leu	Pro	Gly	Trp	Lys	Ala	Asp	Thr	Thr	Gly
			260					265					270		
Ala	Arg	Arg	Trp	Glu	Asp	Leu	Pro	Gln	Ala	Gln	Asn	Tyr	Ile	Arg	
			275				280				285				
Phe	Val	Glu	Asn	His	Val	Gly	Val	Ala	Val	Lys	Trp	Val	Gly	Val	Gly

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 Lys Ser Arg Glu Ser Met Ile Gln Leu Phe
 305 310

<210> 2783
 <211> 2376
 <212> DNA
 <213> Homo sapiens

<400> 2783
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 120
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 180
 aacatagact catcacagta tgaagattca ctgagagaga tggtcaccat tcatgcctac
 240
 attgccttta ccatggacaa actgatccag agcattgtca gacagctgca gcatatcgtg
 300
 agtgatgaga tctgtgtgca ggtgactgac ctttacctgg cagaaaataa taatggggcc
 360
 accggaggcc agctgaacac acagaactca aggagcctcc tggagtcaac gtatcagcgg
 420
 aaagctgagc agctaattgc agatgagaat tgctttaagc ttatgtttat tcagagccaa
 480
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 cctgagcttc gtgaacatct agcacagaaa ccagtatttc tccccaggaa tctacggcgg
 660
 atccggaagt gtcaacgtgg tcgagagcag caggaaaagg aagggaagga aggaaacagc
 720
 aagaagacca tggagaatgt ggatagtctg gataagctgg agtgtagatt caagctgaat
 780
 tctacaaga tgggtgatgt gatcaaatca gaggactata tgtatcggag gaccgacctg
 840
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 900
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 960
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 1020
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 1080
 ccttaactgc aaagccagag cagataactt ggggtgtgtg tggggatgtg tgtgtgggcc
 1140
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 1200
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 1260
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 1320

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 1380
 caccagcaga gctaagactg gagtctcctg tggcctaact ttcaatgagg gaaccggatg
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 1740
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 1860
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 1920
 ttgatgtgct agcataactg ctctagcttc ttgtgtacca tagtactgtg gcttcagatt
 1980
 tagtacctat gaacagatgt acaagacatt tattacactt tttaccaaag ggagttacca
 2040
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 2100
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 2160
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 2220
 aacaggattt tgcttaaaat acttgttact tgtcccaaat caaaatattc caaaatctta
 2280
 gaatacttaa gtcttttagt acgtgttttt ttcccttggt caaataatct gaaaatattt
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 2376

<210> 2784

<211> 361

<212> PRT

<213> Homo sapiens.

<400> 2784

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Glu	Val	Leu	Gly	Ile	Lys	Arg	Asp	Lys	Ser	Asp	Ser	Pro	Ala	Ile	Gln
		20						25				30			
Leu	Arg	Leu	Lys	Glu	Pro	Met	Asp	Val	Asp	Val	Glu	Asp	Tyr	Tyr	Pro
		35					40				45				
Ala	Phe	Leu	Asp	Met	Val	Arg	Ser	Leu	Leu	Asp	Gly	Asn	Ile	Asp	Ser
	50				55					60					
Ser	Gln	Tyr	Glu	Asp	Ser	Leu	Arg	Glu	Met	Phe	Thr	Ile	His	Ala	Tyr
65				70					75				80		
Ile	Ala	Phe	Thr	Met	Asp	Lys	Leu	Ile	Gln	Ser	Ile	Val	Arg	Gln	Leu

	85		90		95
Gln His Ile Val Ser Asp Glu Ile Cys Val Gln Val Thr Asp Leu Tyr					
	100		105		110
Leu Ala Glu Asn Asn Asn Gly Ala Thr Gly Gly Gln Leu Asn Thr Gln					
	115		120		125
Asn Ser Arg Ser Leu Leu Glu Ser Thr Tyr Gln Arg Lys Ala Glu Gln					
	130		135		140
Leu Met Ser Asp Glu Asn Cys Phe Lys Leu Met Phe Ile Gln Ser Gln					
145		150		155	160
Gly Gln Val Gln Leu Thr Ile Glu Leu Leu Asp Thr Glu Glu Glu Asn					
	165		170		175
Ser Asp Asp Pro Val Glu Ala Glu Arg Trp Ser Asp Tyr Val Glu Arg					
	180		185		190
Tyr Met Asn Ser Asp Thr Thr Ser Pro Glu Leu Arg Glu His Leu Ala					
	195		200		205
Gln Lys Pro Val Phe Leu Pro Arg Asn Leu Arg Arg Ile Arg Lys Cys					
	210		215		220
Gln Arg Gly Arg Glu Gln Gln Glu Lys Glu Gly Lys Glu Gly Asn Ser					
225		230		235	240
Lys Lys Thr Met Glu Asn Val Asp Ser Leu Asp Lys Leu Glu Cys Arg					
	245		250		255
Phe Lys Leu Asn Ser Tyr Lys Met Val Tyr Val Ile Lys Ser Glu Asp					
	260		265		270
Tyr Met Tyr Arg Arg Thr Ala Leu Leu Arg Ala His Gln Ser His Glu					
	275		280		285
Arg Val Ser Lys Arg Leu His Gln Arg Phe Gln Ala Trp Val Asp Lys					
	290		295		300
Trp Thr Lys Glu His Val Pro Arg Glu Met Ala Ala Glu Thr Ser Lys					
305		310		315	320
Trp Leu Met Gly Glu Gly Leu Glu Gly Leu Val Pro Cys Thr Thr Thr					
	325		330		335
Cys Asp Thr Glu Thr Leu His Phe Val Ser Ile Asn Lys Tyr Arg Val					
	340		345		350
Lys Tyr Gly Thr Val Phe Lys Ala Pro					
	355		360		

<210> 2785

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2785

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 120
 tgatgagatc ctcttcaca tcttgagtca cgtccccagc acagatctga ttctgaacgt
 180
 ccggcgtacc tgtcggaagc ttgcagccct gtgccttgac aagagcctca tccacaccgt
 240
 gttgctgcaa aaggactatc aggcgagcga ggacaaagtg aggcagctgg tgaaggagat
 300
 cggccgggag atccagcagc tgagcatggc tggctgctac tggctgctg gctccaccgt
 360

ggaacacgtg gcccgctgcc cgcagcctgg tgaaggtgaa cctctcgggc tgccacctca
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 480
 acgtgagccc cg
 492

<210> 2786
 <211> 155
 <212> PRT
 <213> Homo sapiens

<400> 2786
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 Pro Ala Ala Ala Gly Met Ala Asp Gly Val His Leu Leu Gly Phe Ser
 20 25 30
 Asp Glu Ile Leu Leu His Ile Leu Ser His Val Pro Ser Thr Asp Leu
 35 40 45
 Ile Leu Asn Val Arg Arg Thr Cys Arg Lys Leu Ala Ala Leu Cys Leu
 50 55 60
 Asp Lys Ser Leu Ile His Thr Val Leu Leu Gln Lys Asp Tyr Gln Ala
 65 70 75 80
 Ser Glu Asp Lys Val Arg Gln Leu Val Lys Glu Ile Gly Arg Glu Ile
 85 90 95
 Gln Gln Leu Ser Met Ala Gly Cys Tyr Trp Leu Pro Gly Ser Thr Val
 100 105 110
 Glu His Val Ala Arg Cys Pro Gln Pro Gly Glu Gly Glu Pro Leu Gly
 115 120 125
 Leu Pro Pro His Phe Pro Ala Pro Leu Gln Asp Ala Leu Gly Pro Ala
 130 135 140
 Ala Pro Ala Leu Ala Gly His Arg Arg Glu Pro
 145 150 155

<210> 2787
 <211> 299
 <212> DNA
 <213> Homo sapiens

<400> 2787
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 atgtggggag aagagccgta ctctgacata tcagttgcta aaacacgtgc agggcatgcc
 120
 acaatgcaca gacatggcag tatecttctg gtgggaggga gtcaccattt gctctgcctt
 180
 gccctctgct ggggtgctctt acaggtgcta ctgcatccag cgcttgaaac aattctgtgg
 240
 ggtattgatt ctgaagagat cactgatggc cgtgatttct tgccctcagct taccagat
 299

<210> 2788
 <211> 95
 <212> PRT

<213> Homo sapiens

<400> 2788

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Met Thr Arg Asp Ser Gly Met Lys Gln Lys His Ala Ala Ser Thr Ser
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Met Trp Gly Glu Glu Pro Tyr Ser Asp Ile Ser Val Ala Lys Thr Arg
           20           25           30
Ala Gly His Ala Thr Met His Arg His Gly Ser Ile Leu Leu Val Gly
           35           40           45
Gly Ser His His Leu Leu Cys Pro Ala Leu Cys Trp Val Leu Leu Gln
           50           55           60
Val Leu Leu His Pro Ala Leu Glu Thr Ile Leu Trp Gly Ile Asp Ser
65           70           75           80
Glu Glu Ile Thr Asp Gly Arg Asp Phe Leu Pro Gln Leu Thr Gln
           85           90           95

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<210> 2789

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2789

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120
gcgaggccag gctgtgcagt ggggccagca ccagctgcag cttctcctcc agcaggtcca
180
ccctggactg cagcctctgc acttcttctc tcattgcact gtccactcct gcgggcagag
240
ccaggcgtg ggteacggcc ggccggctcc ccaccacac cccagggct ccctcctgtc
300
cccagggaga ggcagagcca gaagactcag gcccaggcct ctgccacccc cgctgcctgc
360
ctggcgctgg ccagaggtct caggetatgc cgcctaagta cgtcggggcg ggtggctctg
420
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480
tcgttccgaa tt
492

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<210> 2790

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2790

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Arg Lys Ser Ala Arg Ser Gly Ser Arg Cys Gly Arg Ala Ala Gly Arg
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Ser Ala Pro Gly Gly Cys Arg Gly Pro Gly Ala His Ala Pro Val Pro
           20           25           30
Ala Arg Pro Gly Cys Ala Val Gly Pro Ala Pro Ala Ala Ala Ser Pro
           35           40           45
Pro Ala Gly Pro Pro Trp Thr Ala Ala Ser Ala Leu Leu Pro Ser Leu

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50		55		60											
His	Cys	Pro	Leu	Leu	Arg	Ala	Glu	Pro	Gly	Ala	Gly	Ser	Arg	Pro	Ala
65					70					75				80	
Gly	Ser	Pro	Pro	Thr	Pro	Pro	Gly	Leu	Pro	Pro	Val	Pro	Arg	Glu	Arg
			85						90				95		
Gln	Ser	Gln	Lys	Thr	Gln	Ala	Gln	Ala	Ser	Ala	Thr	Pro	Ala	Ala	Cys
			100					105					110		
Leu	Ala	Leu	Ala	Arg	Gly	Leu	Arg	Leu	Cys	Arg	Leu	Ser	Thr	Ser	Gly
			115				120					125			
Arg	Val	Ala	Leu	Arg	Arg	Gly	Ser	Gly	Ser	Arg	Pro	Arg			
			130				135					140			

<210> 2791

<211> 1271

<212> DNA

<213> Homo sapiens

<400> 2791

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120
ccaaattccc atttttcttc caatcacatt taaaatttca atatgttgca ggcagtatgt
180
gtaagattat atccaaatat ttactcctgg ttgctcctct tgggcaagct gtgaatatga
240
tcaaatatt taaagaagga agaaggtaaa gatctaaaat atgacatgaa aataccaga
300
gaagtgtgcc taaattagca ttagggtttg agggatccta aggatgacaa aaagggactc
360
ttctattgaa ttcgtggttg atgctcagcg atagtaacaa tctgcctcc cctaactct
420
tctccccctt ccagcagctt cacagaacat ggttgatgag gtaacttagg ggatgcacag
480
ggtgtggcca gaagaccctt ttcctatag accactatga gccctgaaag atttatgagg
540
taatgttcac ttcctcctgt gcttcttttc ctagatgtga actatgaaga ctttactttc
600
accataccag atgtagagga ctcaagtcag agaccagatc agggaccca gagacctcct
660
cctgaaggac tctacctag accccctggt gatagtggta accaagatga tggctcctcag
720
cagagaccac caaaaccagg aggccatcac cgccatcctc cccacactcc ttttcaaaat
780
cagcaacgac caccacaacg aggacaccgt caactctctc taccctgatt tcttctgtc
840
agcctgcagg aagcatcatc attcttccgg agggacagac cagcaagaca tccccaggag
900
caaccactct ggtaatctag aattcagtgg cagaaaataa ataagaagat aacttccttc
960
agaaagccat gacattgaaa taatgtggtc ataactctt cttcagtata ccaataaaat
1020
attaatagca tgcggaagaa agaatggttt gcatccacat ggagagtgtta ccatttagag
1080

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gtaacagggg gaggagaggg tgtgccatca agaggcaaca tggaggtgtt tcaaacctat
 1140
 gcatcttggt ataatatat ctttgctcac atgaatttta cttgttaatt agcctggctg
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<210> 2792

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2792

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Phe	Thr	Phe	Thr	Ile	Pro	Asp	Val	Glu	Asp	Ser	Ser	Gln	Arg	Pro	Asp
			20					25					30		
Gln	Gly	Pro	Gln	Arg	Pro	Pro	Pro	Glu	Gly	Leu	Leu	Pro	Arg	Pro	Pro
		35				40						45			
Gly	Asp	Ser	Gly	Asn	Gln	Asp	Asp	Gly	Pro	Gln	Gln	Arg	Pro	Pro	Lys
	50					55					60				
Pro	Gly	Gly	His	His	Arg	His	Pro	Pro	Pro	Pro	Phe	Gln	Asn	Gln	
65					70					75				80	
Gln	Arg	Pro	Pro	Gln	Arg	Gly	His	Arg	Gln	Leu	Ser	Leu	Pro	Arg	Phe
			85						90					95	
Pro	Ser	Val	Ser	Leu	Gln	Glu	Ala	Ser	Ser	Phe	Phe	Arg	Arg	Asp	Arg
			100					105						110	
Pro	Ala	Arg	His	Pro	Gln	Glu	Gln	Pro	Leu	Trp					
			115				120								

<210> 2793

<211> 847

<212> DNA

<213> Homo sapiens

<400> 2793

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 120
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 180
 cggccctgag agctgactct gcagctgagg tagagagaca acgatcagga accctaagaa
 240
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 300
 attcagtata ttaatgtctt attgataatg gcagaacatc caccactact ggatacaact
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 420
 caacaggtta ttctggtaca agttaaccca ggagaagcat ttacaataag aagagaagat
 480

ggacagtttc agtgcattac aggtcctgct caggttccaa tgatgtcccc aaatggttct
 540
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 660
 caccgttctc cacatctctc tctacctggt ttcattcctg tcccaactat gatgccgcct
 720
 caccacgtca tatgtactca cccgtgactg gagctggaga catgacaaca cagtatatgc
 780
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 840
 cacgcgt
 847

<210> 2794

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2794

Met	Ala	Glu	His	Pro	Pro	Leu	Leu	Asp	Thr	Thr	Gln	Ile	Leu	Ser	Ser
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Asp	Ile	Ser	Leu	Ser	Ala	Pro	Ile	Val	Ser	Ala	Asp	Gly	Thr	Gln	
		20					25				30				
Gln	Val	Ile	Leu	Val	Gln	Val	Asn	Pro	Gly	Glu	Ala	Phe	Thr	Ile	Arg
		35				40					45				
Arg	Glu	Asp	Gly	Gln	Phe	Gln	Cys	Ile	Thr	Gly	Pro	Ala	Gln	Val	Pro
	50					55				60					
Met	Met	Ser	Pro	Asn	Gly	Ser	Val	Pro	Pro	Ile	Tyr	Val	Pro	Pro	Gly
65				70				75					80		
Tyr	Ala	Pro	Gln	Val	Ile	Glu	Asp	Asn	Gly	Val	Arg	Arg	Val	Val	Val
			85					90					95		
Val	Pro	Gln	Ala	Pro	Glu	Phe	His	Pro	Gly	Ser	His	Thr	Val	Leu	His
		100						105					110		
Arg	Ser	Pro	His	Pro	Pro	Leu	Pro	Gly	Phe	Ile	Pro	Val	Pro	Thr	Met
		115				120						125			
Met	Pro	Pro	His	His	Val	Ile	Cys	Thr	His	Pro					
	130					135									

<210> 2795

<211> 1022

<212> DNA

<213> Homo sapiens

<400> 2795

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 120
 gcctggcagc tgctgggtgt ggaatagttc tggatgcaa tctctccag gctctgcgg
 180
 atgtcaccca gcatggaaag gacatcttga gtgggcacca cccctgctc gccaccagt
 240

gtcattgagaa ggtgctgctc cttctcgctg ggcttgctca gagagatgtg ccaggcccca
 300
 tggtagggcac tgccatggcg gggcagcacc tcttccacca gggccaggag ctgtggcccc
 360
 cggtgctgcc ggaacacctc acagtctatg ttctctgtca tgttcagaat gatgtagttt
 420
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 480
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 540
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 600
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 660
 aatgaaggca aggcgggcac ctctctgtag tggccagaca aaccagctgc tctgtagtg
 720
 gcttctctgc ttgcttctg aggagcctcg aactctaccc caagccctgc agctggcagc
 780
 actgtggcct ctgectcttg gctgggtggag tcttggtccc ccggagtcac tgtagttggg
 840
 gtgactgaag gcagcagcaa gctgggcccc atgctgctct ccacctcatc aggtgagnna
 900
 gaaaagtcac ggacctgagg cttggcttct tcttgggagc cattcacagg gagcagctcc
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 gt
 1022

<210> 2796
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 2796
 Ala Ser Ala Ala Cys Pro Ser Arg Ser Cys Trp Leu Arg Ser Ser Cys
 1 5 10 15
 Pro Lys Val Ala Glu Glu Gly Val Ser Ser Met Ser Pro Gly Ala Ser
 20 25 30
 Gly Glu Glu Ala Glu Val Leu Glu Pro Arg Gly Ser Ser Ser Gly Cys
 35 40 45
 Ser Ala Pro Leu Gly Ala Val Val
 50 55

<210> 2797
 <211> 475
 <212> DNA
 <213> Homo sapiens

<400> 2797
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 120

ctgaactcca tcagcgagtc cccgcatgag cgcacgcacc cctacatcga gctggcctgg
 180
 ggcttctcca ccgtgcttgg catcctactc ttcctggccg aggtgggtgct gctctgctgg
 240
 atcaagttcc tccccgtgga tgcccgccgc cagcctggcc cccacactgg ccctgggagt
 300
 cacacgggct ggcaggccgc cctgggtgtcc accatcatca tggtgcccgt gggcctcatc
 360
 ttcgtggtct tcaccatcca cttctaccgc tccctgggtgc gccacaaaac ggagcgccac
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<210> 2798

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2798

Arg	Pro	Leu	Leu	Ile	Ala	Phe	Ser	Ala	Cys	Thr	Thr	Val	Leu	Val	Ala
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Val	His	Leu	Phe	Ala	Leu	Leu	Ile	Ser	Thr	Cys	Ile	Leu	Pro	Asn	Val
		20						25					30		
Glu	Ala	Val	Ser	Asn	Ile	His	Asn	Leu	Asn	Ser	Ile	Ser	Glu	Ser	Pro
	35						40					45			
His	Glu	Arg	Met	His	Pro	Tyr	Ile	Glu	Leu	Ala	Trp	Gly	Phe	Ser	Thr
	50					55					60				
Val	Leu	Gly	Ile	Leu	Leu	Phe	Leu	Ala	Glu	Val	Val	Leu	Leu	Cys	Trp
65				70				75						80	
Ile	Lys	Phe	Leu	Pro	Val	Asp	Ala	Arg	Arg	Gln	Pro	Gly	Pro	Pro	Pro
			85					90					95		
Gly	Pro	Gly	Ser	His	Thr	Gly	Trp	Gln	Ala	Ala	Leu	Val	Ser	Thr	Ile
			100					105					110		
Ile	Met	Val	Pro	Val	Gly	Leu	Ile	Phe	Val	Val	Phe	Thr	Ile	His	Phe
	115					120						125			
Tyr	Arg	Ser	Leu	Val	Arg	His	Lys	Thr	Glu	Arg	His	Asn	Arg	Glu	Ile
	130					135					140				
Glu	Glu	Leu	His	Lys	Leu	Lys	Val	Gln	Leu	Asp	Gly	His	Glu		
145				150						155					

<210> 2799

<211> 2872

<212> DNA

<213> Homo sapiens

<400> 2799

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 120
 gggcagccct tgagcttgac tcctctgggg ccagctctcta tcagaaaatg cctgaccagc
 180
 tcatgggtca tgtctccttt tttattctgc tgcattgatg ttggagggtg cgaagacacc
 240

ttcatggcca gcccgtaaa gcctgagatc tccagggagc aggccatcgc gtcctcaag
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360
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420
atgacccatg agctggtcag gcattttctg atagagactg gccccagagg agtcaagctc
480
aagggtgcc ccaatgagcc aaacttcgga tcgctgtctg ccctggctta ccagcactcc
540
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600
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660
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720
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780
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840
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960
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gccatcgtca acttcgtctc caaggctcatg ctgaatgccg gccaaaagag atgaacctg
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1320
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1380
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1440
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1860

ctgcacctgc actctagtga ccctgggtgc cgccagaccc ttctcttcta caaagacccc
 1920
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 1980
 gctttggttt gaggaggtag agatatgtgt atccatagga agagatctgt cagaacaggc
 2040
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 2580
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 2640
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 2700
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 2760
 aataggtaaa ttgacaagaa gtatttattg tttttccata ttgctttatt gccttccttg
 2820
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<210> 2800

<211> 294

<212> PRT

<213> Homo sapiens

<400> 2800

Met Ser Pro Phe Leu Phe Cys Cys Met Met Val Gly Gly Gly Glu Asp
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 Thr Phe Met Ala Ser Pro Tyr Lys Pro Glu Ile Ser Arg Glu Gln Ala
 20 25 30
 Ile Ala Leu Leu Lys Asp Gln Glu Pro Gly Ala Phe Ile Ile Arg Asp
 35 40 45
 Ser His Ser Phe Arg Gly Ala Tyr Gly Leu Ala Met Lys Val Ser Ser
 50 55 60
 Pro Pro Pro Thr Ile Met Gln Gln Asn Lys Lys Gly Asp Met Thr His
 65 70 75 80
 Glu Leu Val Arg His Phe Leu Ile Glu Thr Gly Pro Arg Gly Val Lys
 85 90 95
 Leu Lys Gly Cys Pro Asn Glu Pro Asn Phe Gly Ser Leu Ser Ala Leu

	100		105		110										
Val	Tyr	Gln	His	Ser	Ile	Ile	Pro	Leu	Ala	Leu	Pro	Cys	Lys	Leu	Val
	115						120					125			
Ile	Pro	Asn	Arg	Asp	Pro	Thr	Asp	Glu	Ser	Lys	Asp	Ser	Ser	Gly	Pro
	130					135					140				
Ala	Asn	Ser	Thr	Ala	Asp	Leu	Leu	Lys	Gln	Gly	Ala	Ala	Cys	Asn	Val
145					150					155				160	
Leu	Phe	Ile	Asn	Ser	Val	Asp	Met	Glu	Ser	Leu	Thr	Gly	Pro	Gln	Ala
			165					170					175		
Ile	Ser	Lys	Ala	Thr	Ser	Glu	Thr	Leu	Ala	Ala	Asp	Pro	Thr	Pro	Ala
	180						185					190			
Ala	Thr	Ile	Val	His	Phe	Lys	Val	Ser	Ala	Gln	Gly	Ile	Thr	Leu	Thr
195						200					205				
Asp	Asn	Gln	Arg	Lys	Leu	Phe	Phe	Arg	Arg	His	Tyr	Pro	Leu	Asn	Thr
210					215			220							
Val	Thr	Phe	Cys	Asp	Leu	Asp	Pro	Gln	Glu	Arg	Lys	Trp	Met	Lys	Thr
225				230				235					240		
Glu	Gly	Gly	Ala	Pro	Ala	Lys	Leu	Phe	Gly	Phe	Val	Ala	Arg	Lys	Gln
			245					250					255		
Gly	Ser	Thr	Thr	Asp	Asn	Ala	Cys	His	Leu	Phe	Ala	Glu	Leu	Asp	Pro
		260					265				270				
Asn	Gln	Pro	Ala	Ser	Ala	Ile	Val	Asn	Phe	Val	Ser	Lys	Val	Met	Leu
	275				280						285				
Asn	Ala	Gly	Gln	Lys	Arg										
	290														

<210> 2801

<211> 549

<212> DNA

<213> Homo sapiens

<400> 2801

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120

ttcagcacac cagtggggca gtgcctcgaa aaggcaacag atggctccct gcaaagtgcg
180

gattggacgt tgaatatgga gatctgtgac atcatcaatg agacggagga agggccaaag
240

gatgccattc gagccctgaa gaagcggctc aacgggaacc ggaactacag agaggtgatg
300

ctggcattaa cagtgtctga gacatgtgtg aagaactgtg gccaccgctt ccacatcctt
360

gtggccaacc gagatttcat cgacagtgtt ctggtcaaaa ttatatctcc caagaacaac
420

cctcccacca ttgtacagga caaagtgtt gctctgatcc aggcattggc tgatgccttt
480

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540

gttgaattc
549

<210> 2802

<211> 151
 <212> PRT
 <213> Homo sapiens

<400> 2802
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 Leu Glu Lys Ala Thr Asp Gly Ser Leu Gln Ser Glu Asp Trp Thr Leu
 20 25 30
 Asn Met Glu Ile Cys Asp Ile Ile Asn Glu Thr Glu Glu Gly Pro Lys
 35 40 45
 Asp Ala Ile Arg Ala Leu Lys Lys Arg Leu Asn Gly Asn Arg Asn Tyr
 50 55 60
 Arg Glu Val Met Leu Ala Leu Thr Val Leu Glu Thr Cys Val Lys Asn
 65 70 75 80
 Cys Gly His Arg Phe His Ile Leu Val Ala Asn Arg Asp Phe Ile Asp
 85 90 95
 Ser Val Leu Val Lys Ile Ile Ser Pro Lys Asn Asn Pro Pro Thr Ile
 100 105 110
 Val Gln Asp Lys Val Leu Ala Leu Ile Gln Ala Trp Ala Asp Ala Phe
 115 120 125
 Arg Ser Ser Pro Asp Leu Thr Gly Val Val His Ile Tyr Glu Glu Leu
 130 135 140
 Lys Arg Lys Gly Val Glu Phe
 145 150

<210> 2803
 <211> 459
 <212> DNA
 <213> Homo sapiens

<400> 2803
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 tggccccac caccggagg agcagctcct gccctgtcc ggggatgac tgattctcct
 120
 ccgccagccg tagggtgtgt gctgtccggg ctcacgggga ccctgtctcc gagtcgttcg
 180
 tgcagcgtgt gtaccagccc ttcctcacca cctgcgacgg gcaccgggccc tgcagcacct
 240
 accgcaatat gccagccgcc atgccggaac ggagggagct gtgtccagcc tggccgctgc
 300
 cgctgccctg caggatggcg gggtagact tgccagtcag atgtggacna gtgcaatgaa
 360
 ggaagaagtg cagaggctgc agtccagggt ggacctgctg gaggagaagc tgcagctggt
 420
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 459

<210> 2804
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 2804
 Xaa Met Ala Thr Pro Gly Leu Gln Gln His Gln Gln Pro Pro Gly Pro
 1 5 10 15
 Gly Arg His Arg Trp Pro Pro Pro Pro Gly Gly Ala Ala Pro Ala Pro
 20 25 30
 Val Arg Gly Met Thr Asp Ser Pro Pro Pro Ala Val Gly Cys Val Leu
 35 40 45
 Ser Gly Leu Thr Gly Thr Leu Ser Pro Ser Arg Ser Cys Ser Val Cys
 50 55 60
 Thr Ser Pro Ser Ser Pro Pro Ala Thr Gly Thr Gly Pro Ala Ala Pro
 65 70 75 80
 Thr Ala Ile Cys Gln Pro Pro Cys Arg Asn Gly Gly Ser Cys Val Gln
 85 90 95
 Pro Gly Arg Cys Arg Cys Pro Ala Gly Trp Arg Gly Asp Thr Cys Gln
 100 105 110
 Ser Asp Val Asp Xaa Cys Asn Glu Gly Arg Ser Ala Glu Ala Ala Val
 115 120 125
 Gln Gly Gly Pro Ala Gly Gly Glu Ala Ala Ala Gly Thr Gly Pro Thr
 130 135 140
 Ala Gln Pro Gly Leu Ala Gly Thr Gly
 145 150

<210> 2805
 <211> 771
 <212> DNA
 <213> Homo sapiens

<400> 2805
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 aagtttaate agacctgctc acacttcaga atagagaaga ttgagaggat ccagaatcca
 120
 gatctctgga atagctacca ggcaaagaaa aaaactatgg atgccaagaa tggccagaca
 180
 atgaatgaga agcaactctt ccatgggaca gatgccggct ccgtgccaca cgtcaatcga
 240
 aatggcttta accgcagcta tgccggaaag aatgctgtgg catatggaaa gggaacctat
 300
 tttgctgtca atgccaatta ttctgccaat gatacgtact ccagaccaga tgcaaattggg
 360
 agaaagcatg tgtattatgt gcgagtactt actggaatct atacacatgg aaatcattca
 420
 ttaattgtgc ctcttcaaa gaacctcaa aatcctactg acctgtatga cactgtcaca
 480
 gataatgtgc accatccaag tttatttgtg gcattttatg actaccaagc ataccagag
 540
 taccttatta cgtttagaaa ataactttt ggtatccttc ccacaaaatt attctccatt
 600
 tgtacatate tagttgtaaa acaagtttta gctttttttt ttaattcctc ttaacagatt
 660
 tttctaatat ccaaggatca ttctttgtcg ctgcagtcag atctttcttc agcttctctt
 720
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 771

<210> 2806
 <211> 187
 <212> PRT
 <213> Homo sapiens

<400> 2806
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 Thr Val Ala Ser Lys Phe Asn Gln Thr Cys Ser His Phe Arg Ile Glu
 20 25 30
 Lys Ile Glu Arg Ile Gln Asn Pro Asp Leu Trp Asn Ser Tyr Gln Ala
 35 40 45
 Lys Lys Lys Thr Met Asp Ala Lys Asn Gly Gln Thr Met Asn Glu Lys
 50 55 60
 Gln Leu Phe His Gly Thr Asp Ala Gly Ser Val Pro His Val Asn Arg
 65 70 75 80
 Asn Gly Phe Asn Arg Ser Tyr Ala Gly Lys Asn Ala Val Ala Tyr Gly
 85 90 95
 Lys Gly Thr Tyr Phe Ala Val Asn Ala Asn Tyr Ser Ala Asn Asp Thr
 100 105 110
 Tyr Ser Arg Pro Asp Ala Asn Gly Arg Lys His Val Tyr Tyr Val Arg
 115 120 125
 Val Leu Thr Gly Ile Tyr Thr His Gly Asn His Ser Leu Ile Val Pro
 130 135 140
 Pro Ser Lys Asn Pro Gln Asn Pro Thr Asp Leu Tyr Asp Thr Val Thr
 145 150 155 160
 Asp Asn Val His His Pro Ser Leu Phe Val Ala Phe Tyr Asp Tyr Gln
 165 170 175
 Ala Tyr Pro Glu Tyr Leu Ile Thr Phe Arg Lys
 180 185

<210> 2807
 <211> 1660
 <212> DNA
 <213> Homo sapiens

<400> 2807
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 caccatcacc ccacagcgag caagtctttt gttccctcag ctcttgcgac aaagtcagaa
 120
 ccaggtgct cagggccgcc tgtgaatgca ggtgccttgt cccaaacaga ggacatatta
 180
 atagggccat gatttctgt tgccacaatt ttgccaaggc aggtggcac cagaacacca
 240
 aagaaggga attatagtgg agtagcagtt tgtgaatctg gaggccttgg ttcaatcaca
 300
 gaacaagtag ggagaggagc caggacctag gccttcaggt tttagcaag gaaggactct
 360
 caggccatcc ttgcagttca gttaacagga ggaagcaagg atccccagag agctggagta
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 480

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 780
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 960
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 aacgctgatg gtggtctcag ggggaaaact caggacctgc acataagtgg atgaccggaa
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 1260
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 1320
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 1660

<210> 2808

<211> 390

<212> PRT

<213> Homo sapiens

<400> 2808

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Glu	Leu	Ala	Gly	Cys	Ala	Ser	Cys	Leu	Thr	Val	Gln	Asp	Asn	Trp	Thr
			20					25					30		
Leu	Glu	Leu	Glu	Ser	Ser	Gln	Asp	Ile	Gln	Asp	Val	Leu	Asp	Ala	Asn
			35				40					45			
Lys	Ser	Leu	Pro	Glu	Ser	Ser	Leu	Thr	Asp	Leu	Leu	Ser	Asp	Asn	Phe

50		55		60											
Thr	Asp	Ser	Leu	Val	Ser	Phe	Ser	Ala	Glu	Ile	Leu	Ser	Arg	Thr	Leu
65				70						75					80
Cys	Glu	Pro	Leu	Val	Ala	Ser	Leu	Trp	Met	Lys	Leu	Gly	Asn	Thr	Gly
			85						90					95	
Ala	Met	Arg	Arg	Cys	Val	Lys	Leu	Thr	Val	Ala	Leu	Glu	Thr	Ala	Glu
			100					105					110		
Cys	Glu	Phe	Pro	Pro	His	Leu	Asp	Val	Tyr	Ile	Glu	Asp	Pro	His	Leu
		115					120					125			
Pro	Pro	Ser	Leu	Gly	Leu	Leu	Pro	Gly	Ala	Arg	Val	His	Phe	Ser	Gln
	130				135						140				
Leu	Glu	Lys	Arg	Val	Ser	Arg	Ser	His	Asn	Val	Tyr	Cys	Cys	Phe	Arg
145				150					155						160
Ser	Ser	Thr	Tyr	Val	Gln	Val	Leu	Ser	Phe	Pro	Pro	Glu	Thr	Thr	Ile
			165						170					175	
Ser	Val	Pro	Leu	Pro	His	Ile	Tyr	Leu	Ala	Glu	Leu	Leu	Gln	Gly	Gly
		180						185					190		
Gln	Ser	Pro	Phe	Gln	Ala	Thr	Ala	Ser	Cys	His	Ile	Val	Ser	Val	Phe
	195					200						205			
Ser	Leu	Gln	Leu	Phe	Trp	Val	Cys	Ala	Tyr	Cys	Thr	Ser	Ile	Cys	Arg
	210					215					220				
Gln	Gly	Lys	Cys	Thr	Arg	Leu	Gly	Ser	Thr	Cys	Pro	Thr	Gln	Thr	Ala
225				230					235					240	
Ile	Ser	Gln	Ala	Ile	Ile	Arg	Leu	Leu	Val	Glu	Asp	Gly	Thr	Ala	Glu
			245						250					255	
Ala	Val	Val	Thr	Cys	Arg	Asn	His	His	Val	Ala	Ala	Ala	Leu	Gly	Leu
		260						265					270		
Cys	Pro	Arg	Glu	Trp	Ala	Ser	Leu	Leu	Asp	Phe	Val	Gln	Val	Pro	Gly
	275					280						285			
Arg	Val	Val	Leu	Gln	Phe	Ala	Gly	Pro	Gly	Ala	Gln	Leu	Glu	Ser	Ser
	290					295					300				
Ala	Arg	Val	Asp	Glu	Pro	Met	Thr	Met	Phe	Leu	Trp	Thr	Leu	Cys	Thr
305				310					315					320	
Ser	Pro	Ser	Val	Leu	Arg	Pro	Ile	Val	Leu	Ser	Phe	Glu	Leu	Glu	Arg
			325					330						335	
Lys	Pro	Ser	Lys	Ile	Val	Pro	Leu	Glu	Pro	Pro	Arg	Leu	Gln	Arg	Phe
		340						345					350		
Gln	Cys	Gly	Glu	Leu	Pro	Phe	Leu	Thr	His	Val	Asn	Pro	Arg	Leu	Arg
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Leu	Ser	Cys	Leu	Ser	Ile	Arg	Glu	Ser	Glu	Tyr	Ser	Ser	Ser	Leu	Gly
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<210> 2809

<211> 1502

<212> DNA

<213> Homo sapiens

<400> 2809

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<210> 2810

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2810

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 Ala Cys Val Cys Ala Cys Val Arg Leu Cys Val Arg Leu Cys Ala Cys
 35 40 45
 Val Cys Ala Ser Val Cys Met Cys Ala Arg Ala Xaa Val Cys Val Cys
 50 55 60
 Thr Cys Val Xaa Leu Cys Thr Arg Val Cys Val Cys Val His Ala Cys
 65 70 75 80
 Val Cys Val Cys Ala Arg Ala Cys Thr Ser Pro Pro Glu His Leu Gly
 85 90 95
 Phe Gly Thr Arg Trp Phe
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<210> 2811

<211> 591

<212> DNA

<213> Homo sapiens

<400> 2811

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 caaaggagac cataaagtgt aggatatttc ctggttagtg gctgccgggt aatcacgatg
 180
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<210> 2812

<211> 131

<212> PRT

<213> Homo sapiens

<400> 2812

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 20 25 30
 Pro Ala Pro Ala Val Asp Glu Pro Gln Pro Xaa Ser Gln Ala Pro Pro

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      35              40              45
Gly Pro Arg Val Pro Gly Pro Pro Arg Pro Trp Gly Ala Ala Pro Leu
  50              55              60
Arg Pro Arg Pro Gly Glu Gly Asp Pro Val Thr Arg Glu Arg Ser Pro
  65              70              75              80
Val Pro Gly Ala Thr Glu Met Pro Pro Pro Arg Pro Lys Val Pro Ala
      85              90              95
Pro Pro Gly Pro Thr Gly Arg Ser Pro Arg Ala Ala Val Gly His His
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Leu Gly Ser
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<210> 2813

<211> 2417

<212> DNA

<213> Homo sapiens

<400> 2813

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 1020

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<210> 2814

<211> 471

<212> PRT

<213> Homo sapiens

<400> 2814

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 Trp Lys Glu Leu Ser Leu Lys Tyr Lys Gln Ser Phe Gln Glu Ala Arg
 35 40 45
 Asp Glu Leu Val Glu Phe Gln Glu Gly Ser Arg Glu Leu Glu Ala Glu
 50 55 60
 Leu Glu Ala Gln Leu Val Gln Ala Glu Gln Arg Asn Arg Asp Leu Gln
 65 70 75 80
 Ala Asp Asn Gln Arg Leu Lys Tyr Glu Val Glu Ala Leu Lys Glu Lys
 85 90 95
 Leu Glu His Gln Tyr Ala Gln Ser Tyr Lys Gln Val Ser Val Leu Glu
 100 105 110
 Asp Asp Leu Ser Gln Thr Arg Ala Ile Lys Glu Gln Leu His Lys Tyr
 115 120 125
 Val Arg Glu Leu Glu Gln Ala Asn Asp Asp Leu Glu Arg Ala Lys Arg
 130 135 140
 Ala Thr Ile Val Ser Leu Glu Thr Leu Asn Lys Leu Asn Gln Ala Ile
 145 150 155 160
 Glu Arg Asn Ala Phe Leu Glu Ser Glu Leu Asp Glu Lys Glu Ser Leu
 165 170 175
 Leu Val Ser Val Gln Arg Leu Lys Asp Glu Ala Arg Asp Leu Arg Gln
 180 185 190
 Glu Leu Ala Val Arg Glu Arg Gln Gln Glu Val Thr Arg Lys Ser Ala
 195 200 205
 Pro Ser Ser Pro Thr Leu Asp Cys Glu Lys Met Asp Ser Ala Val Gln
 210 215 220
 Ala Ser Leu Ser Leu Pro Ala Thr Pro Val Gly Lys Gly Thr Glu Asn
 225 230 235 240
 Thr Phe Pro Ser Pro Lys Ala Ile Pro Asn Gly Phe Gly Thr Ser Pro
 245 250 255
 Leu Thr Pro Ser Ala Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu
 260 265 270
 Leu Arg Lys Val Gly Ala Leu Glu Ser Lys Leu Ala Ala Cys Arg Asn
 275 280 285
 Phe Ala Lys Asp Gln Ala Ser Arg Lys Ser Tyr Ile Ser Gly Asn Val
 290 295 300
 Asn Cys Gly Val Leu Asn Gly Asn Gly Thr Lys Phe Ser Arg Ser Gly
 305 310 315 320
 His Thr Ser Phe Phe Asp Lys Gly Ala Val Asn Gly Phe Asp Pro Ala
 325 330 335
 Pro Pro Pro Pro Gly Leu Gly Ser Ser Arg Pro Ser Ser Ala Pro Gly
 340 345 350
 Met Cys Leu Ser Val Cys Glu Cys Leu Ala Ser Arg Gly Ala Pro Ala
 355 360 365
 Leu Leu Gln Gln Pro Arg Thr Pro Thr Pro His Pro Ser Val Pro Gly
 370 375 380
 Pro Ser Pro Val Pro Leu Arg Leu Pro Pro His Gly Trp Gln Arg Ala
 385 390 395 400
 Gly Cys Met Gln Trp Arg Leu Leu Gly Pro Ala Gln Pro Arg Asn Ser
 405 410 415
 Ala Arg Tyr Gln Tyr Trp Leu Phe Ser Leu Leu Ala Val Val Pro Leu

420 425 430
 Val Ser His Asp Cys Thr Phe Val Gly Arg Lys Val Ile His Thr Cys
 435 440 445
 Ile Thr Trp Ser Leu Asp Ala Glu Val Pro Ile His His Thr Cys Pro
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 Ile Ala Pro Thr Leu Leu Tyr
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<210> 2815
 <211> 1421
 <212> DNA
 <213> Homo sapiens

<400> 2815
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<210> 2816

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2816

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			20					25					30		
Val	Arg	Ala	His	Gly	Asp	Pro	Val	Ser	Glu	Ser	Phe	Val	Gln	Arg	Val
		35					40					45			
Tyr	Gln	Pro	Phe	Leu	Thr	Thr	Cys	Asp	Gly	His	Arg	Ala	Cys	Ser	Thr
	50					55					60				
Tyr	Arg	Thr	Ile	Tyr	Arg	Thr	Ala	Tyr	Arg	Arg	Ser	Pro	Gly	Leu	Ala
65				70					75					80	
Pro	Ala	Arg	Pro	Arg	Tyr	Ala	Cys	Cys	Pro	Gly	Trp	Lys	Arg	Thr	Ser
			85					90					95		
Gly	Leu	Pro	Gly	Ala	Cys	Gly	Ala	Ala	Ile	Cys	Gln	Pro	Pro	Cys	Arg
		100					105					110			
Asn	Gly	Gly	Ser	Cys	Val	Gln	Pro	Gly	Arg	Cys	Arg	Cys	Pro	Ala	Gly
	115					120					125				
Trp	Arg	Gly	Asp	Thr	Cys	Gln	Ser	Asp	Val	Asp	Glu	Cys	Ser	Ala	Arg
	130				135					140					
Arg	Gly	Gly	Cys	Pro	Gln	Arg	Cys	Val	Asn	Thr	Ala	Gly	Ser	Tyr	Trp
145				150					155					160	
Cys	Gln	Cys	Trp	Glu	Gly	His	Ser	Leu	Ser	Ala	Asp	Gly	Thr	Leu	Cys
			165					170					175		
Val	Pro	Lys	Gly	Gly	Pro	Pro	Arg	Val	Ala	Pro	Asn	Pro	Thr	Gly	Val
		180					185						190		
Asp	Ser	Ala	Met	Lys	Glu	Glu	Val	Gln	Arg	Leu	Gln	Ser	Arg	Val	Asp
	195					200					205				
Leu	Leu	Glu	Glu	Lys	Leu	Gln	Leu	Val	Leu	Ala	Pro	Leu	His	Ser	Leu
	210				215					220					
Ala	Ser	Gln	Ala	Gly	Ala	Trp	Ala	Pro	Gly	Pro	Arg	Gln	Pro	Pro	Gly
225				230					235				240		
Ala	Leu	Leu	Pro	Ala	Ala	Arg	Pro	His	Arg	Leu	Pro	Glu	Arg	Ala	Asp
			245					250					255		
Phe	Leu	Pro	Gly	Gly	Ala	Ala	Gly	Val	Leu	Leu	Leu	Gln	Glu	Arg	Leu
		260					265					270			
Xaa	Asp	Cys	Pro	Ala	Pro	Gln	Ala	Gly	Leu	Ser	Pro	Ser	Arg	Arg	Pro
	275					280						285			
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305

<210> 2817

<211> 219

<212> DNA

<213> Homo sapiens

<400> 2817

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<210> 2818

<211> 73

<212> PRT

<213> Homo sapiens

<400> 2818

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 Pro Gly Ala Ser Leu Gly Pro Gly Val Leu Leu Arg Ala Glu Phe His
 35 40 45
 Gln His Gln His Thr His Gln His Thr His Gln His Thr His Gln His
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 Gln His Thr Phe Ala Pro Phe Thr Arg
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<210> 2819

<211> 730

<212> DNA

<213> Homo sapiens

<400> 2819

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 120
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 420

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<210> 2820

<211> 195

<212> PRT

<213> Homo sapiens

<400> 2820

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			20				25						30		
Ser	Ala	Gly	Ala	Arg	Gly	His	Thr	Gly	Pro	Lys	Gly	Gln	Lys	Gly	Ser
		35				40					45				
Met	Gly	Ala	Pro	Gly	Glu	Arg	Cys	Lys	Ser	His	Tyr	Ala	Ala	Phe	Ser
	50					55				60					
Val	Gly	Arg	Glu	Ala	His	Ala	Gln	Gln	Pro	Leu	Leu	Pro	Asp	Val	Ile
65					70					75				80	
Phe	Asp	Thr	Glu	Phe	Val	Asn	Leu	Tyr	Asp	His	Phe	Asn	Met	Phe	Thr
			85						90					95	
Gly	Lys	Phe	Tyr	Cys	Tyr	Val	Pro	Gly	Leu	Tyr	Phe	Phe	Ser	Leu	Asn
			100					105					110		
Val	His	Thr	Trp	Asn	Gln	Lys	Glu	Thr	Tyr	Leu	His	Ile	Met	Lys	Asn
	115					120						125			
Glu	Glu	Glu	Val	Val	Ile	Leu	Phe	Ala	Gln	Val	Gly	Asp	Arg	Ser	Ile
	130					135					140				
Met	Gln	Ser	Gln	Ser	Leu	Met	Leu	Glu	Leu	Arg	Glu	Gln	Asp	Gln	Val
145				150					155					160	
Trp	Val	Arg	Leu	Tyr	Lys	Gly	Glu	Arg	Glu	Asn	Ala	Ile	Phe	Ser	Glu
			165					170					175		
Glu	Leu	Asp	Thr	Tyr	Ile	Thr	Phe	Ser	Gly	Tyr	Leu	Val	Lys	His	Ala
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Thr	Glu	Pro													
		195													

<210> 2821

<211> 1746

<212> DNA

<213> Homo sapiens

<400> 2821

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<210> 2822

<211> 424

<212> PRT

<213> Homo sapiens

<400> 2822

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			20					25					30		
Leu	Ser	Asn	Ile	Ile	Asn	Lys	Leu	Glu	Thr	Lys	Asn	Glu	Leu	His	
		35					40					45			
Lys	His	Val	Glu	Phe	Asp	Phe	Leu	Ile	Lys	Gly	Gln	Phe	Leu	Arg	Met
	50					55					60				
Pro	Leu	Asp	Lys	His	Met	Glu	Met	Glu	Asp	Ile	Ser	Ser	Glu	Glu	Val
65					70				75					80	
Val	Glu	Ile	Glu	Tyr	Val	Glu	Lys	Tyr	Thr	Ala	Pro	Gln	Pro	Glu	Gln
				85					90					95	
Cys	Met	Phe	His	Asp	Asp	Trp	Ile	Ser	Ser	Ile	Lys	Gly	Ala	Glu	Glu
			100					105					110		
Trp	Ile	Leu	Thr	Gly	Ser	Tyr	Gly	Lys	Thr	Ser	Arg	Ile	Trp	Ser	Leu
	115						120					125			
Glu	Gly	Lys	Ser	Ile	Met	Thr	Ile	Val	Gly	His	Thr	Asp	Val	Val	Lys
	130					135					140				
Asp	Val	Ala	Trp	Val	Lys	Lys	Asp	Ser	Leu	Ser	Cys	Leu	Leu	Xaa	Glu
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Cys	Phe	Tyr	Gly	Ser	Asp	Tyr	Ser	Leu	Met	Gly	Val	Glu	Cys	Arg	Glu
				165					170					175	
Lys	Gln	Ser	Glu	Ser	Pro	Thr	Leu	Leu	Xaa	Arg	Gly	His	Ala	Gly	Ser
			180					185					190		
Val	Asp	Ser	Ile	Ala	Val	Asp	Gly	Ser	Gly	Thr	Lys	Phe	Cys	Ser	Gly
	195						200					205			
Ser	Trp	Asp	Lys	Met	Leu	Lys	Ile	Trp	Ser	Thr	Val	Pro	Thr	Asp	Glu
	210					215					220				
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225					230					235				240	
Thr	Glu	Gln	Leu	Gly	Leu	Thr	Arg	Thr	Pro	Ile	Val	Thr	Leu	Ser	Gly
				245					250					255	
His	Met	Glu	Ala	Val	Ser	Ser	Val	Leu	Trp	Ser	Asp	Ala	Glu	Glu	Ile
			260					265					270		
Cys	Ser	Ala	Ser	Trp	Asp	His	Thr	Ile	Arg	Val	Trp	Asp	Val	Glu	Ser
	275						280					285			
Gly	Ser	Leu	Lys	Ser	Thr	Leu	Thr	Gly	Asn	Lys	Val	Phe	Asn	Cys	Ile
	290					295					300				
Ser	Tyr	Ser	Pro	Leu	Cys	Lys	Arg	Leu	Ala	Ser	Gly	Ser	Thr	Asp	Arg
305					310					315				320	
His	Ile	Arg	Leu	Trp	Asp	Pro	Arg	Thr	Lys	Asp	Gly	Ser	Leu	Val	Ser
				325					330					335	
Leu	Ser	Leu	Thr	Ser	His	Thr	Gly	Trp	Val	Thr	Ser	Val	Lys	Trp	Ser

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          340          345          350
Pro Thr His Glu Gln Gln Leu Ile Ser Gly Ser Leu Asp Asn Ile Val
          355          360          365
Lys Leu Trp Asp Thr Arg Ser Cys Lys Ala Pro Leu Tyr Asp Leu Ala
          370          375          380
Ala His Glu Asp Lys Val Leu Ser Val Asp Trp Thr Asp Thr Gly Leu
385          390          395          400
Leu Leu Ser Gly Gly Ala Asp Asn Lys Leu Tyr Ser Tyr Arg Tyr Ser
          405          410          415
Pro Thr Thr Ser His Val Gly Ala
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<210> 2823

<211> 461

<212> DNA

<213> Homo sapiens

<400> 2823

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180
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300
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461

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<210> 2824

<211> 81

<212> PRT

<213> Homo sapiens

<400> 2824

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          20          25          30
Leu Gln Ala Gln Ala His Thr Gly Pro Ala Ser Pro Ala Ala Leu Pro
          35          40          45
Lys Gly Asp Ala Cys Asp Cys Val Cys Leu Pro Thr Gly Val Thr Thr
          50          55          60
His Pro Arg Pro Pro Glu Pro Gln His Glu Gly Ser Ala Pro Phe Pro
65          70          75          80
His

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<210> 2825
<211> 1520
<212> DNA
<213> Homo sapiens

<400> 2825
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120
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180
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<210> 2826

<211> 506

<212> PRT

<213> Homo sapiens

<400> 2826

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			20					25					30		
Thr	Ala	Leu	Met	Glu	Ala	Cys	Met	Asp	Gly	His	Val	Glu	Val	Ala	Arg
		35					40					45			
Leu	Leu	Leu	Asp	Ser	Gly	Ala	Gln	Val	Asn	Met	Pro	Ala	Asp	Ser	Phe
		50				55				60					
Glu	Ser	Pro	Leu	Thr	Leu	Ala	Ala	Cys	Gly	Gly	His	Val	Glu	Leu	Ala
65					70					75				80	
Ala	Leu	Leu	Ile	Glu	Arg	Gly	Ala	Asn	Leu	Glu	Glu	Val	Asn	Asp	Glu
			85					90						95	
Gly	Tyr	Thr	Pro	Leu	Met	Glu	Ala	Ala	Arg	Glu	Gly	His	Glu	Glu	Met
			100					105					110		
Val	Ala	Leu	Leu	Leu	Ser	Thr	Arg	Ser	Xaa	Ile	Ser	Met	His	Arg	Gln
		115					120					125			
Lys	Lys	Leu	Lys	Lys	Leu	Leu	Leu	Thr	Leu	Ala	Cys	Cys	Gly	Gly	Phe
		130				135					140				
Leu	Glu	Val	Ala	Asp	Phe	Leu	Ile	Lys	Ala	Gly	Ala	Asp	Ile	Glu	Leu
145					150					155				160	
Gly	Cys	Ser	Thr	Pro	Leu	Met	Glu	Ala	Ala	Gln	Glu	Gly	His	Leu	Glu
				165				170						175	
Leu	Val	Lys	Tyr	Leu	Leu	Ala	Ala	Gly	Ala	Asn	Val	His	Ala	Thr	Thr
			180					185					190		
Ala	Thr	Gly	Asp	Thr	Ala	Leu	Thr	Tyr	Ala	Cys	Glu	Asn	Gly	His	Thr
		195					200					205			
Asp	Val	Ala	Asp	Val	Leu	Leu	Gln	Ala	Gly	Ala	Asp	Leu	Asp	Lys	Gln
		210				215					220				
Glu	Asp	Met	Lys	Thr	Ile	Leu	Glu	Gly	Ile	Asp	Pro	Ala	Lys	His	Leu
225					230					235				240	
Glu	His	Glu	Ser	Glu	Gly	Gly	Arg	Thr	Pro	Leu	Met	Lys	Ala	Ala	Arg
				245					250					255	
Ala	Gly	His	Val	Cys	Thr	Val	Gln	Phe	Leu	Ile	Ser	Lys	Gly	Ala	Asn
			260					265					270		
Val	Asn	Arg	Thr	Thr	Ala	Asn	Asn	Asp	His	Thr	Val	Leu	Ser	Leu	Ala
		275					280					285			
Cys	Ala	Gly	Gly	His	Leu	Ala	Val	Val	Glu	Leu	Leu	Leu	Ala	His	Gly
		290				295				300					
Ala	Asp	Pro	Thr	His	Arg	Leu	Lys	Asp	Gly	Ser	Thr	Met	Leu	Ile	Glu
305					310					315				320	
Ala	Ala	Lys	Gly	Gly	His	Thr	Ser	Val	Val	Cys	Tyr	Leu	Leu	Asp	Tyr
				325					330					335	
Pro	Asn	Asn	Leu	Leu	Ser	Ala	Pro	Pro	Pro	Asp	Val	Thr	Gln	Leu	Thr

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Pro Pro Ser His Asp Leu Asn Arg Ala Pro Arg Val Pro Val Gln Ala
          355          360          365
Leu Pro Met Val Val Pro Pro Gln Glu Pro Asp Lys Pro Pro Ala Asn
          370          375          380
Val Ala Thr Thr Leu Pro Ile Arg Asn Lys Ala Ala Ser Lys Gln Lys
385          390          395          400
Ser Ser Ser His Leu Pro Ala Asn Ser Gln Asp Val Gln Gly Tyr Ile
          405          410          415
Thr Asn Gln Ser Pro Glu Ser Ile Val Glu Glu Ala Gln Gly Lys Leu
          420          425          430
Thr Glu Leu Glu Gln Arg Ile Lys Glu Ala Ile Glu Lys Asn Ala Gln
          435          440          445
Leu Gln Ser Leu Glu Leu Ala His Ala Asp Gln Leu Thr Lys Glu Lys
          450          455          460
Ile Glu Glu Leu Asn Lys Thr Arg Glu Glu Gln Ile Gln Lys Lys Gln
465          470          475          480
Lys Ile Leu Glu Glu Leu Gln Lys Val Glu Arg Glu Leu Gln Leu Lys
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<210> 2827

<211> 481

<212> DNA

<213> Homo sapiens

<400> 2827

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<210> 2828

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2828

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	20	25	30
Leu Tyr Pro Gly Gly Cys Gln Gln Leu Leu His Leu Cys Val Gln Gln			
	35	40	45
Pro Leu Gln Leu Leu Gln Val Glu Phe Leu Arg Leu Asn Thr His Glu			
	50	55	60
Asp Pro Gln Leu Leu Glu Ala Thr Leu Ala Gln Leu Pro Gln Asn Leu			
65	70	75	80
Ser Cys Leu Arg Ser Leu Val Leu Lys Arg Gly Gln Arg Arg Asp Thr			
	85	90	95
Leu Gly Ala Cys Leu Arg Gly Ala Leu Thr Asn Leu Pro Ala Gly Leu			
	100	105	110
Ser Gly Leu Ala His Leu Ala His Leu Asp Leu Ser Phe Asn Ser Leu			
	115	120	125
Glu Thr Leu Pro Ala Cys Val Leu Gln Met Arg Gly Leu Gly Ala Leu			
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<210> 2829

<211> 3648

<212> DNA

<213> Homo sapiens

<400> 2829

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900

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<210> 2830

<211> 668

<212> PRT

<213> Homo sapiens

<400> 2830

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Cys	Met	Thr	Asp	Ala	Lys	Lys	Leu	Tyr	Thr	Leu	Phe	Tyr	Val	His Gly
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Ser	Lys	Leu	Asn	Asp	Met	Ile	Asp	Ala	Ile	Pro	Lys	Ser	Lys	Lys Asn
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Asp	Glu	Val	Val	Leu	Ile	Asp	Ser	Ser	Cys	Leu	Leu	Glu	Thr	Leu Glu
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<210> 2831

<211> 3986

<212> DNA

<213> Homo sapiens

<400> 2831

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<210> 2832

<211> 611

<212> PRT

<213> Homo sapiens

<400> 2832

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Gly Thr Arg Thr Ser Ser Gly Arg Leu Arg Arg Leu Gly Asp Ser Ser
      35          40          45
Gly Pro Ala Leu Lys Arg Ser Phe Glu Val Glu Glu Val Glu Thr Pro
 50          55          60
Asn Ser Thr Pro Pro Arg Arg Val Gln Thr Pro Leu Leu Arg Ala Thr
65          70          75          80
Val Ala Ser Ser Thr Gln Lys Phe Gln Asp Leu Gly Val Lys Asn Ser
      85          90          95
Glu Pro Ser Ala Arg His Val Asp Ser Leu Ser Gln Arg Ser Pro Lys
      100          105          110
Ala Ser Leu Arg Arg Val Glu Leu Ser Gly Pro Lys Ala Ala Glu Pro
      115          120          125
Val Ser Arg Arg Thr Glu Leu Ser Ile Asp Ile Ser Ser Lys Gln Val
      130          135          140
Glu Asn Ala Gly Ala Ile Gly Pro Ser Arg Phe Gly Leu Lys Arg Ala
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Glu Val Leu Gly His Lys Thr Pro Glu Pro Ala Pro Arg Arg Thr Glu
      165          170          175
Ile Thr Ile Val Lys Pro Gln Glu Ser Ala His Arg Arg Met Glu Pro
      180          185          190
Pro Ala Ser Lys Val Pro Glu Val Pro Thr Ala Pro Ala Thr Asp Ala
      195          200          205
Ala Pro Lys Arg Val Glu Ile Gln Met Pro Lys Pro Ala Glu Ala Pro
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Thr Ala Pro Ser Pro Ala Gln Thr Leu Glu Asn Ser Glu Pro Ala Pro
225          230          235          240
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      245          250          255
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      260          265          270
Cys Val Gly Asp Met Ala Asp Thr Pro Arg Asp Ala Gly Leu Lys Gln
      275          280          285
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      290          295          300
Gly Ile Asp Ser Ile Leu Glu Gln Met Arg Arg Lys Ala Met Lys Gln
305          310          315          320
Gly Phe Glu Phe Asn Ile Met Val Val Gly Gln Ser Gly Leu Gly Lys
      325          330          335
Ser Thr Leu Ile Asn Thr Leu Phe Lys Ser Lys Ile Ser Arg Lys Ser
      340          345          350
Val Gln Pro Thr Ser Glu Glu Arg Ile Pro Lys Thr Ile Glu Ile Lys
      355          360          365
Ser Ile Thr His Asp Ile Glu Glu Lys Gly Val Arg Met Lys Leu Thr

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 Val His Cys Cys Leu Tyr Phe Ile Pro Ala Thr Gly His Ser Leu Arg
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 Val Pro Val Ile Ala Lys Ala Asp Thr Leu Thr Leu Glu Glu Arg Val
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 His Phe Lys Gln Arg Ile Thr Ala Asp Leu Leu Ser Asn Gly Ile Asp
 485 490 495
 Val Tyr Pro Gln Lys Glu Phe Asp Glu Asp Ser Glu Asp Arg Leu Val
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 Asn Glu Lys Phe Arg Glu Met Ile Pro Phe Ala Val Val Gly Ser Asp
 515 520 525
 His Glu Tyr Gln Val Asn Gly Lys Arg Ile Leu Gly Arg Lys Thr Lys
 530 535 540
 Trp Gly Thr Ile Glu Val Glu Asn Thr Thr His Cys Glu Phe Ala Tyr
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<210> 2833

<211> 420

<212> DNA

<213> Homo sapiens

<400> 2833

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<210> 2834

<211> 117
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Ser Gly Arg Asn Val Thr Thr Gly Ser Leu Gly Glu Pro Gln Trp Leu
 35           40           45
Arg Val Ala Thr Gly Gly Arg Pro Gly Thr Ser Pro Ala Leu Phe Ser
 50           55           60
Gly Arg Gly Ala Ala Thr Gly Gly Arg Gln Gly Gly Arg Phe Asp Thr
 65           70           75           80
Lys Cys Leu Ala Ala Thr Trp Gly Arg Leu Pro Gly Pro Glu Glu
 85           90           95
Thr Leu Pro Gly Gln Asp Ser Trp Asn Gly Val Pro Ser Arg Ala Gly
 100          105          110
Leu Gly Met Cys Ala
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<210> 2835
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 <212> DNA
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<400> 2835

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<210> 2836

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<213> Homo sapiens

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Arg	Pro	Ser	Gly	Ser	His	Gly	Gln	Met	Ser	Gly	Asp	Thr	Glu	Ser	Glu
			35				40					45			
Thr	Leu	Ser	Val	Arg	Gly	Glu	Asp	Ile	Gly	Glu	Asp	Leu	Phe	Ser	Glu
	50					55				60					
Ala	Leu	Gly	Arg	Ala	Val	Gly	Gln	Trp	Ala	Gly	Ala	Lys	Leu	Leu	Asp
65					70				75					80	
His	Gly	Cys	Val	Glu	Ser	Ser	Ile	Leu	Asp	Ser	Ser	Ala	Gly	Ser	Ala
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Pro	His	Tyr	Glu	Val	Phe	Val	Ala	Leu	Arg	Gly	Leu	Arg	Asn	Leu	Ser
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Thr	Trp	Trp	Cys	Pro	Glu	Ser	Ser	Pro	Ala	Pro	Pro	Pro	Ser	Ser	Pro
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<210> 2837

<211> 1250

<212> DNA

<213> Homo sapiens

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<211> 370

<212> PRT

<213> Homo sapiens

<400> 2838

Xaa	Leu	Pro	Ser	Ser	Pro	Leu	Leu	Glu	His	His	Ala	Thr	Arg	Arg	Val
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Ile	Ser	Ser	Pro	Val	Phe	Thr	Met	Glu	Asp	Ser	Gly	Lys	Thr	Phe	Ser
			20					25					30		
Ser	Glu	Glu	Glu	Glu	Ala	Asn	Tyr	Trp	Lys	Asp	Leu	Ala	Met	Thr	Tyr
		35				40					45				
Lys	Gln	Arg	Ala	Glu	Asn	Thr	Gln	Glu	Glu	Leu	Arg	Glu	Phe	Gln	Glu
		50			55					60					
Gly	Ser	Arg	Glu	Tyr	Glu	Ala	Glu	Leu	Glu	Thr	Gln	Leu	Gln	Gln	Ile
65				70				75					80		
Glu	Thr	Arg	Asn	Arg	Asp	Leu	Leu	Ser	Glu	Asn	Asn	Arg	Leu	Arg	Met
			85					90					95		
Glu	Leu	Glu	Thr	Ile	Lys	Glu	Lys	Phe	Glu	Val	Gln	His	Ser	Glu	Gly
			100					105					110		
Tyr	Arg	Gln	Ile	Ser	Ala	Leu	Glu	Asp	Asp	Leu	Ala	Gln	Thr	Lys	Ala

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      115      120      125
Ile Lys Asp Gln Leu Gln Lys Tyr Ile Arg Glu Leu Glu Gln Ala Asn
 130      135      140
Asp Ala Leu Glu Arg Ala Lys Arg Ala Thr Ile Met Ser Leu Glu Asp
145      150      155      160
Phe Glu Gln Arg Leu Asn Gln Ala Ile Glu Arg Asn Ala Phe Leu Glu
      165      170      175
Ser Glu Leu Asp Glu Lys Glu Asn Leu Leu Glu Ser Val Gln Arg Leu
      180      185      190
Lys Asp Glu Ala Arg Asp Leu Arg Gln Glu Leu Ala Val Gln Gln Lys
      195      200      205
Gln Glu Lys Pro Arg Thr Pro Met Pro Ser Ser Val Glu Ala Glu Arg
      210      215      220
Thr Asp Thr Ala Val Gln Ala Thr Gly Ser Val Pro Ser Thr Pro Ile
225      230      235      240
Ala His Arg Gly Pro Ser Ser Ser Leu Asn Thr Pro Gly Ser Phe Arg
      245      250      255
Arg Gly Leu Asp Asp Xaa His Arg Gly Thr Pro Leu Thr Pro Ala Ala
      260      265      270
Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu Leu Arg Lys Val Gly
      275      280      285
Ala Leu Glu Ser Lys Leu Ala Ser Cys Arg Asn Leu Val Tyr Asp Gln
      290      295      300
Ser Pro Asn Arg Thr Gly Gly Pro Ala Ser Gly Arg Ser Ser Lys Asn
305      310      315      320
Arg Asp Gly Gly Glu Arg Arg Pro Ser Ser Thr Ser Val Pro Leu Gly
      325      330      335
Asp Lys Gly Ser Val Pro Ser Asn Lys Pro Leu Ala Gly Gly Glu Asn
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Pro Pro Ala Pro Gly Lys Arg His Ser Pro Pro Ala His Ser His Val
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Ser Phe
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<210> 2839

<211> 606

<212> DNA

<213> Homo sapiens

<400> 2839

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360
aagctccaac tctacggtcc caccaacatt gccccatca tccagaagg tgcgaagtca
420

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 606

<210> 2840

<211> 202

<212> PRT

<213> Homo sapiens

<400> 2840

Ile	Leu	Asn	Leu	Cys	Lys	Ile	His	Lys	Met	His	Ser	Phe	Leu	Asp	Tyr
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Ile	Met	Gly	Gly	Cys	Gln	Ile	Gln	Phe	Thr	Val	Ala	Ile	Asp	Phe	Ala
			20					25					30		
Ala	Thr	Asn	Gly	Asp	Pro	Arg	Asn	Ser	Cys	Ser	Leu	His	Tyr	Ile	His
		35					40					45			
Pro	Tyr	Gln	Pro	Asn	Glu	Tyr	Leu	Lys	Ala	Leu	Val	Ala	Val	Gly	Glu
	50				55					60					
Ile	Cys	Gln	Asp	Tyr	Asp	Ser	Asp	Lys	Met	Phe	Pro	Ala	Phe	Gly	Phe
65				70					75					80	
Gly	Ala	Arg	Ile	Pro	Pro	Glu	Tyr	Thr	Val	Ser	His	Asp	Phe	Ala	Ile
			85					90					95		
Asn	Phe	Asn	Glu	Asp	Asn	Pro	Glu	Cys	Ala	Gly	Ile	Gln	Gly	Val	Val
		100						105					110		
Glu	Ala	Tyr	Gln	Ser	Cys	Leu	Pro	Lys	Leu	Gln	Leu	Tyr	Gly	Pro	Thr
	115						120					125			
Asn	Ile	Ala	Pro	Ile	Ile	Gln	Lys	Val	Ala	Lys	Ser	Ala	Ser	Glu	Glu
	130					135					140				
Thr	Asn	Thr	Lys	Glu	Ala	Ser	Gln	Tyr	Phe	Ile	Leu	Leu	Ile	Leu	Thr
145				150					155					160	
Asp	Gly	Val	Ile	Thr	Asp	Met	Gly	Asp	Thr	Arg	Glu	Ala	Ile	Val	His
			165					170						175	
Ala	Ser	His	Leu	Pro	Met	Ser	Val	Ile	Ile	Val	Gly	Val	Gly	Asn	Ala
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Asp	Phe	Ser	Asp	Met	Gln	Met	Leu	Asp	Gly						
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<210> 2841

<211> 2065

<212> DNA

<213> Homo sapiens

<400> 2841

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 120
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240
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420
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<210> 2842

<211> 540

<212> PRT

<213> Homo sapiens

<400> 2842

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Ala	Leu	Gly	Ala	Glu	Gly	Ser	Asn	Ala	Glu	Ser	Leu	Asp	Arg	Leu	Leu
			20					25					30		
Pro	Pro	Val	Gly	Thr	Gly	Arg	Ser	Pro	Arg	Lys	Arg	Thr	Thr	Ser	Gln
		35					40					45			
Cys	Lys	Ser	Glu	Pro	Pro	Leu	Arg	Thr	Ser	Lys	Arg	Thr	Ile	Tyr	
	50					55				60					
Thr	Ala	Gly	Arg	Pro	Pro	Trp	Tyr	Asn	Glu	His	Gly	Thr	Gln	Ser	Lys
65					70				75					80	
Glu	Ala	Phe	Ala	Ile	Gly	Leu	Gly	Gly	Gly	Ser	Ala	Ser	Gly	Lys	Thr
				85				90						95	
Thr	Val	Ala	Arg	Met	Ile	Ile	Glu	Ala	Leu	Asp	Val	Pro	Trp	Val	Val
			100					105					110		
Leu	Leu	Ser	Met	Asp	Ser	Phe	Tyr	Lys	Val	Leu	His	Ser	Leu	Pro	His
		115					120					125			
Gln	Val	Leu	Thr	Glu	Gln	Gln	Gln	Glu	Gln	Ala	Ala	His	Asn	Asn	Phe
	130					135					140				
Asn	Phe	Asp	His	Pro	Asp	Ala	Phe	Asp	Phe	Asp	Leu	Ile	Ile	Ser	Thr
145				150					155					160	
Leu	Lys	Lys	Leu	Lys	Gln	Gly	Lys	Ser	Val	Lys	Val	Pro	Ile	Tyr	Asp
			165					170						175	
Phe	Thr	Thr	His	Ser	Arg	Lys	Lys	Asp	Trp	Lys	Thr	Leu	Tyr	Gly	Ala
			180					185					190		
Asn	Val	Ile	Ile	Phe	Glu	Gly	Ile	Met	Ala	Phe	Ala	Asp	Lys	Thr	Leu
	195						200					205			
Leu	Glu	Leu	Leu	Asp	Met	Lys	Ile	Phe	Val	Asp	Thr	Asp	Ser	Asp	Ile
	210				215						220				
Arg	Leu	Val	Arg	Arg	Leu	Arg	Arg	Asp	Ile	Ser	Glu	Arg	Gly	Arg	Asp
225					230					235				240	
Ile	Glu	Gly	Val	Ile	Lys	Gln	Tyr	Asn	Lys	Phe	Val	Lys	Pro	Ser	Phe
			245					250						255	
Asp	Gln	Tyr	Ile	Gln	Pro	Thr	Met	Arg	Leu	Ala	Asp	Ile	Val	Val	Pro
		260					265					270			
Arg	Gly	Ser	Gly	Asn	Thr	Val	Ala	Ile	Asp	Leu	Ile	Val	Gln	His	Val
	275					280						285			
His	Ser	Gln	Leu	Glu	Glu	Arg	Glu	Leu	Ser	Val	Arg	Ala	Ala	Leu	Ala

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Ser Ala His Gln Cys His Pro Leu Pro Arg Thr Leu Ser Val Leu Lys				
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Ser Thr Pro Gln Val Arg Gly Met His Thr Ile Ile Arg Asp Lys Glu				
	325		330	335
Thr Ser Arg Asp Glu Phe Ile Phe Tyr Ser Lys Arg Leu Met Arg Leu				
	340		345	350
Leu Ile Glu His Ala Leu Ser Phe Leu Pro Phe Gln Asp Cys Val Val				
	355		360	365
Gln Thr Pro Gln Gly Gln Asp Tyr Ala Gly Lys Cys Tyr Ala Gly Lys				
	370		375	380
Gln Ile Thr Gly Val Ser Ile Leu Arg Ala Gly Glu Thr Met Glu Pro				
385		390		395
Ala Leu Arg Ala Val Cys Lys Asp Val Arg Ile Gly Thr Ile Leu Ile				
	405		410	415
Gln Thr Asn Gln Leu Thr Gly Glu Pro Glu Leu His Tyr Leu Arg Leu				
	420		425	430
Pro Lys Asp Ile Ser Asp Asp His Val Ile Leu Met Asp Cys Thr Val				
	435		440	445
Ser Thr Gly Ala Ala Ala Met Met Ala Val Arg Val Leu Leu Asp His				
	450		455	460
Asp Val Pro Glu Asp Lys Ile Phe Leu Leu Ser Leu Leu Met Ala Glu				
465		470		475
Met Gly Val His Ser Val Ala Tyr Ala Phe Pro Arg Val Arg Ile Ile				
	485		490	495
Thr Thr Ala Val Asp Lys Arg Val Asn Asp Leu Phe Arg Ile Ile Pro				
	500		505	510
Gly Ile Gly Asn Phe Gly Asp Arg Tyr Phe Gly Thr Asp Ala Val Pro				
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Asp Gly Ser Asp Glu Glu Glu Val Ala Tyr Thr Gly				
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<210> 2843

<211> 497

<212> DNA

<213> Homo sapiens

<400> 2843

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<210> 2844
<211> 165
<212> PRT
<213> Homo sapiens

<400> 2844
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Ser Gln Asn Thr Glu Leu Lys Thr Gln Ser Pro Glu Phe Glu Ala Gln
35 40 45
Ser Ser Lys Phe Gln Glu Gly Ala Glu Met Leu Leu Asn Pro Glu Glu
50 55 60
Lys Ser Pro Leu Asn Ile Ser Val Gly Val His Pro Leu Asp Ser Phe
65 70 75 80
Thr Gln Gly Phe Gly Glu Gln Pro Thr Gly Asp Leu Pro Ile Gly Pro
85 90 95
Pro Phe Glu Met Pro Thr Gly Ala Leu Leu Ser Thr Pro Gln Phe Glu
100 105 110
Met Leu Gln Asn Pro Leu Gly Leu Thr Gly Ala Leu Arg Gly Pro Gly
115 120 125
Arg Arg Gly Gly Arg Ala Arg Gly Gly Gln Gly Pro Arg Pro Asn Ile
130 135 140
Cys Gly Ile Trp Gly Lys Ser Phe Gly Arg Asp Tyr Pro Asp Pro Ala
145 150 155 160
Gln Ala Ser Thr Pro
165

<210> 2845
<211> 934
<212> DNA
<213> Homo sapiens

<400> 2845
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120
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360
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420
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480

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<210> 2846

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2846

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Leu	Pro	Cys	Pro	Leu	Gly	Ser	Gly	Arg	Leu	Trp	Leu	Met	Pro	Thr	Arg
			20					25					30		
Cys	His	Lys	Gly	Leu	Ser	Asp	Arg	Cys	Ser	Pro	Ser	Leu	Pro	Cys	Leu
		35					40					45			
Pro	His	Arg	Pro	Ser	Pro	Pro	Glu	Pro	Ala	Phe	Leu	Pro	Gln	His	Leu
	50					55				60					
Pro	Ser	Leu	Ala	Thr	Gly	Tyr	Ile	Cys	Val	Asp	Cys	Leu	Ser	Leu	His
65					70					75				80	
Gly	Asn	Val	Arg	Thr	Ile	Phe	Val	Cys	Cys	Gly	Thr	Ala	Ala	Leu	Arg
			85					90						95	
Ala	Ala	Ser	Ser	Thr	Gln	Val	Ala	Leu	Asp	Thr	Asp	Cys	Thr	Gln	Gly
			100					105					110		
Glu	Leu	Gly	Leu	Ile	Thr	Pro	Leu	Thr	Arg	Gly	Glu	Thr	Leu	Gln	Leu
		115					120				125				
Glu	Val	Thr	Phe	Ile	Pro	Leu	Gln	Leu	Arg	Pro	Phe	His	Ser	Pro	Arg
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Thr	His	Arg	Gly	Ala											
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<210> 2847

<211> 2830

<212> DNA

<213> Homo sapiens

<400> 2847

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 1920
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<211> 856

<212> PRT

<213> Homo sapiens

<400> 2848

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<213> Homo sapiens

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 Gln Lys Leu Arg His Pro Asn Thr Ile Gln Tyr Arg Gly Cys Tyr Leu
 85 90 95
 Arg Glu His Thr Ala Trp Leu Val Met Glu Tyr Cys Leu Gly Ser Ala
 100 105 110
 Ser Asp Leu Leu Glu Val His Lys Lys Pro Leu Gln Glu Val Glu Ile
 115 120 125
 Ala Ala Val Thr His Gly Ala Leu Gln Gly Leu Ala Tyr Leu His Ser
 130 135 140
 His Asn Met Ile His Arg Asp Val Lys Ala Gly Asn Ile Leu Leu Ser
 145 150 155 160
 Glu Pro Gly Leu Val Lys Leu Gly Asp Phe Gly Ser Ala Ser Ile Met
 165 170 175
 Ala Pro Ala Asn Ser Phe Val Gly Thr Pro Tyr Trp Met Ala Pro Glu
 180 185 190
 Val Ile Leu Ala Met Asp Glu Gly Gln Tyr Asp Gly Lys Val Asp Val
 195 200 205
 Trp Ser Leu Gly Ile Thr Cys Ile Glu Leu Ala Glu Arg Lys Pro Pro
 210 215 220
 Leu Phe Asn Met Asn Ala Met Ser Ala Leu Tyr His Ile Ala Gln Asn
 225 230 235 240
 Glu Ser Pro Val Leu Gln Ser Gly His Trp Ser Glu Tyr Phe Arg Asn

2091

675					680					685					
Glu	Leu	Glu	Leu	Arg	Gln	Leu	Gln	Ala	Val	Gln	Arg	Thr	Arg	Ala	Glu
690					695					700					
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705				710						715					720
Asn	Lys	Arg	Arg	Glu	Gln	Glu	Leu	Arg	Gln	Lys	His	Ala	Ala	Gln	Val
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Arg	Gln	Gln	Pro	Lys	Ser	Leu	Lys	Val	Arg	Ala	Gly	Gln	Arg	Pro	Pro
			740					745					750		
Gly	Leu	Pro	Leu	Pro	Ile	Pro	Gly	Ala	Leu	Gly	Pro	Pro	Asn	Thr	Gly
		755					760					765			
Thr	Pro	Ile	Glu	Gln	Gln	Pro	Cys	Ser	Pro	Gly	Gln	Glu	Ala	Val	Leu
		770				775					780				
Asp	Gln	Arg	Met	Leu	Gly	Glu	Glu	Glu	Glu	Ala	Val	Gly	Glu	Arg	Arg
785				790						795					800
Ile	Leu	Gly	Lys	Glu	Gly	Ala	Thr	Leu	Glu	Pro	Lys	Gln	Gln	Arg	Ile
				805					810					815	
Leu	Gly	Glu	Glu	Ser	Gly	Ala	Pro	Ser	Pro	Ser	Pro	Gln	Lys	His	Gly
			820					825					830		
Ser	Leu	Val	Asp	Glu	Glu	Val	Trp	Gly	Leu	Pro	Glu	Glu	Ile	Glu	Glu
			835				840					845			
Leu	Arg	Val	Pro	Ser	Leu	Val	Pro	Gln	Glu	Arg	Ser	Ile	Val	Gly	Gln
			850			855					860				
Glu	Glu	Ala	Gly	Thr	Trp	Ser	Leu	Trp	Gly	Lys	Glu	Asp	Glu	Ser	Leu
865				870					875						880
Leu	Asp	Glu	Glu	Phe	Glu	Leu	Gly	Trp	Val	Gln	Gly	Pro	Ala	Leu	Thr
				885					890					895	
Pro	Val	Pro	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Gly	Ala	Pro	Ile	Gly	
			900				905					910			
Thr	Pro	Arg	Asp	Pro	Gly	Asp	Gly	Cys	Pro	Ser	Pro	Asp	Ile	Pro	Pro
			915				920					925			
Glu	Pro	Pro	Pro	Thr	His	Leu	Arg	Pro	Cys	Pro	Ala	Ser	Gln	Leu	Pro
			930			935					940				
Gly	Leu	Leu	Ser	His	Gly	Leu	Leu	Ala	Gly	Leu	Ser	Phe	Ala	Val	Gly
945				950					955						960
Ser	Ser	Ser	Gly	Leu	Leu	Pro	Leu	Leu	Leu	Leu	Leu	Leu	Pro	Leu	
				965					970					975	
Leu	Ala	Ala	Gln	Gly	Gly	Gly	Gly	Leu	Gln	Ala	Ala	Leu	Leu	Ala	Leu
			980				985					990			
Glu	Val	Gly	Leu	Val	Gly	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Leu	Cys	Thr
			995				1000					1005			
Ala	Leu	His	Leu	Pro	Ser	Ser	Leu	Phe	Leu	Leu	Leu	Ala	Gln	Gly	Thr
			1010				1015					1020			
Ala	Leu	Gly	Ala	Val	Leu	Gly	Leu	Ser	Trp	Arg	Arg	Gly	Leu	Met	Gly
1025				1030					1035						1040
Val	Pro	Leu	Gly	Leu	Gly	Ala	Ala	Trp	Leu	Leu	Ala	Trp	Pro	Gly	Leu
				1045					1050					1055	
Ala	Leu	Pro	Leu	Val	Ala	Met	Ala	Ala	Gly	Gly	Arg	Trp	Val	Arg	Gln
			1060				1065						1070		
Gln	Gly	Pro	Arg	Val	Arg	Arg	Gly	Ile	Ser	Arg	Leu	Trp	Leu	Arg	Val
			1075				1080					1085			
Leu	Leu	Arg	Leu	Ser	Pro	Met	Ala	Phe	Arg	Ala	Leu	Gln	Gly	Cys	Gly
			1090			1095					1100				
Ala	Val	Gly	Asp	Arg	Gly	Leu	Phe	Ala	Leu	Tyr	Pro	Lys	Thr	Asn	Lys

1105 1110 1115 1120
 Asp Gly Phe Arg Ser Arg Leu Pro Val Pro Gly Pro Arg Arg Arg Asn
 1125 1130 1135
 Pro Arg Thr Thr Gln His Pro Leu Ala Leu Leu Ala Arg Val Trp Val
 1140 1145 1150
 Leu Cys Lys Gly Trp Asn Trp Arg Leu Ala Arg Ala Ser Gln Gly Leu
 1155 1160 1165
 Ala Ser His Leu Pro Pro Trp Ala Ile His Thr Leu Ala Ser Trp Gly
 1170 1175 1180
 Leu Leu Arg Gly Glu Arg Pro Thr Arg Ile Pro Arg Leu Leu Pro Arg
 1185 1190 1195 1200
 Ser Gln Arg Gln Leu Gly Pro Pro Ala Ser His Gln Pro Leu Pro Gly
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 Pro Trp Arg
 1235

<210> 2855

<211> 1676

<212> DNA

<213> Homo sapiens

<400> 2855

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 120
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 180
 acaatggaca tattgacatt ggctcacacc tccacagaag ctaagggcct gtctcagag
 240
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 300
 agcgctcttt ccgacggccc ccatccagtc atcaccccggt cacgggcctc agagagcagc
 360
 gcctcttccg acggccccca tccagtcac accccgtcat ggtccccggg atctgatgtc
 420
 actctcctcg ctgaagccct ggtgactgtc acaaacatcg aggttattaa ttgcagcatc
 480
 acagaaatag aaacaacgac ttccagcatc cctggggcct cagacacaga tctcatcccc
 540
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 600
 aagcaaaacc acacatcact gaggtcanca gcctctgccg agaccctgtc cacagccggc
 660
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 720
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 780
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 840
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 900

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 960
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 1140
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 1320
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 1380
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 1440
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 1676

<210> 2856

<211> 401

<212> PRT

<213> Homo sapiens

<400> 2856

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		20					25						30		
Gln	Thr	Ile	Thr	Gly	Ser	Asp	Pro	Glu	Glu	Ala	Ile	Phe	Asp	Thr	Leu
	35					40					45				
Cys	Thr	Asp	Asp	Ser	Ser	Glu	Glu	Ala	Lys	Thr	Leu	Thr	Met	Asp	Ile
	50				55					60					
Leu	Thr	Leu	Ala	His	Thr	Ser	Thr	Glu	Ala	Lys	Gly	Leu	Ser	Ser	Glu
65				70					75					80	
Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro	Val	Ile	Thr	Pro	Ser	Arg
		85				90							95		
Ala	Ser	Glu	Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro	Val	Ile	Thr
		100				105						110			
Pro	Ser	Arg	Ala	Ser	Glu	Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro
	115					120						125			
Val	Ile	Thr	Pro	Ser	Trp	Ser	Pro	Gly	Ser	Asp	Val	Thr	Leu	Leu	Ala
	130				135						140				
Glu	Ala	Leu	Val	Thr	Val	Thr	Asn	Ile	Glu	Val	Ile	Asn	Cys	Ser	Ile
145				150					155					160	
Thr	Glu	Ile	Glu	Thr	Thr	Thr	Ser	Ser	Ile	Pro	Gly	Ala	Ser	Asp	Thr

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      165      170      175
Asp Leu Ile Pro Thr Glu Gly Val Lys Ala Ser Ser Thr Ser Asp Pro
      180      185      190
Pro Ala Leu Pro Asp Ser Xaa Leu Lys Gln Asn His Thr Ser Leu Arg
      195      200      205
Ser Xaa Ala Ser Ala Glu Thr Leu Ser Thr Ala Gly Thr Thr Glu Ser
      210      215      220
Ala Ala Pro Asp Ala Thr Val Gly Thr Pro Leu Pro Thr Asn Ser Thr
225      230      235      240
Ile Glu Arg Glu Val Thr Ala Pro Arg Ala Thr Thr Leu Ser Gly Ala
      245      250      255
Leu Val Thr Val Ser Arg Asn Pro Leu Glu Glu Thr Ser Ala Leu Ser
      260      265      270
Val Glu Thr Pro Ser Tyr Val Lys Val Ser Gly Ala Ala Pro Val Ser
      275      280      285
Ile Glu Ala Gly Ser Ala Val Gly Lys Thr Thr Ser Phe Ala Gly Ser
      290      295      300
Ser Ala Ser Ser Tyr Ser Pro Ser Glu Ala Ala Leu Lys Asn Phe Thr
305      310      315      320
Pro Ser Glu Thr Pro Thr Met Asp Ile Ala Thr Lys Gly Pro Phe Pro
      325      330      335
Thr Ser Arg Asp Pro Leu Pro Ser Val Pro Pro Thr Thr Thr Asn Ser
      340      345      350
Ser Arg Gly Thr Asn Ser Thr Leu Ala Lys Ile Thr Thr Ser Ala Lys
      355      360      365
Thr Thr Met Lys Pro Pro Thr Ala Thr Pro Thr Thr Ala Arg Thr Arg
      370      375      380
Pro Thr Thr Asp Val Ser Ala Gly Glu Asn Gly Gly Ser Ser Ser Cys
385      390      395      400
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<210> 2857

<211> 1668

<212> DNA

<213> Homo sapiens

<400> 2857

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120
aggctagcca gagggtaatt acacaggtgt aggcggcgcg ggcgggcgga gggctcggga
180
ggcgcagggg actggaagag ttggctgcgc ccaggcacca ggtggaagaa tttccatacc
240
agccctgcgg aggtgcctct gtttccagag gcgtttttgt acgaagggca ttttgaaagc
300
gaagcagaag ccgtagaatc agcggcgagc ctgttgaaag aaccacaggt tgcatttcac
360
agcactctgg gcgaaaattg gatgtgaaaa tgaagccaga ccgagatact ctggatgaat
420
attttgaata tgatgcagag gagttcttgg tctctttggc cttgctgata acagaaggac
480

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gaacacctga atgttctgta aaaggctgaa cagaaagctt tcattgccct ccagcacagt
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 600
 ccagacgaac taggtctgag gtcacattgt tgtggaagaa taaccttcca atcatgggtg
 660
 aaatgatgct actaccagac tgctgctaca gcgatgatgg gccaccaca gaggggaattg
 720
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 780
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 840
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 900
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 960
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 1020
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 1080
 actaatattg gcctttatga gaaaagaatt caacaacata aacttaaaac tcatcagcac
 1140
 cataacccaa atgaagcaga acaatgtggg acaaacagtt cacagcgtct gtgtagcaaa
 1200
 caaacttgga ccatggcacc tgaaagtgtg ttacatgcaa aaagtggccc aagtccagaa
 1260
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 1320
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 1380
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 1440
 agtttctggc agtcagctgg tgagactaac cctttaatag gctctttaat tcaggagcgg
 1500
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 1560
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 1620
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 1668

<210> 2858

<211> 220

<212> PRT

<213> Homo sapiens

<400> 2858

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Glu	Glu	Phe	Leu	Val	Ser	Leu	Ala	Leu	Leu	Ile	Thr	Glu	Gly	Arg	Thr
			20					25					30		
Pro	Glu	Cys	Ser	Val	Lys	Gly	Arg	Thr	Glu	Ser	Phe	His	Cys	Pro	Pro
		35				40					45				
Ala	Gln	Ser	Cys	Tyr	Pro	Val	Thr	Thr	Lys	His	Glu	Cys	Ser	Asp	Lys

50 55 60
 Leu Ala Gln Cys Arg Gln Ala Arg Arg Thr Arg Ser Glu Val Thr Leu
 65 70 75 80
 Leu Trp Lys Asn Asn Leu Pro Ile Met Val Glu Met Met Leu Leu Pro
 85 90 95
 Asp Cys Cys Tyr Ser Asp Asp Gly Pro Thr Thr Glu Gly Ile Asp Leu
 100 105 110
 Asn Asp Pro Ala Ile Lys Gln Asp Ala Leu Leu Leu Glu Arg Trp Ile
 115 120 125
 Leu Glu Pro Val Pro Arg Gln Asn Gly Asp Arg Phe Ile Glu Glu Lys
 130 135 140
 Thr Leu Leu Leu Ala Val Arg Ser Phe Val Phe Phe Ser Gln Leu Ser
 145 150 155 160
 Ala Trp Leu Ser Val Ser His Gly Ala Ile Pro Arg Asn Ile Leu Tyr
 165 170 175
 Arg Ile Ser Ala Ala Asp Val Asp Leu Gln Trp Asn Phe Ser Gln Thr
 180 185 190
 Pro Ile Glu His Val Phe Pro Val Pro Asn Val Ser His Asn Val Ala
 195 200 205
 Leu Lys Val Ser Gly Gln Ser Leu Ala Gln Thr Ile
 210 215 220

<210> 2859

<211> 1029

<212> DNA

<213> Homo sapiens

<400> 2859

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 120
 caccggcga tggtccctcg aaggggcagc ggtagtggca gcgcctctgc tctcaatgca
 180
 gcaggtaccg gcgtcggtag taatgccaca tcttccgagg attttccgcc tccgtcgctg
 240
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 300
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 420
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 480
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 540
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 660
 cttccacaac agaattgtgt gatcaatggg aatgctcctc cacaccacct ccataccac
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<210> 2860
<211> 343
<212> PRT
<213> Homo sapiens
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			20					25					30		
Asp	Ile	Ser	Ala	Arg	Lys	Met	Ala	His	Pro	Ala	Met	Phe	Pro	Arg	Arg
		35				40						45			
Gly	Ser	Gly	Ser	Gly	Ser	Ala	Ser	Ala	Leu	Asn	Ala	Ala	Gly	Thr	Gly
	50					55					60				
Val	Gly	Ser	Asn	Ala	Thr	Ser	Ser	Glu	Asp	Phe	Pro	Pro	Pro	Ser	Leu
65					70					75					80
Leu	Gln	Pro	Pro	Pro	Pro	Ala	Ala	Ser	Ser	Thr	Ser	Gly	Pro	Gln	Pro
				85				90						95	
Pro	Pro	Pro	Gln	Ser	Leu	Asn	Leu	Leu	Ser	Gln	Ala	Gln	Leu	Gln	Ala
			100					105					110		
Gln	Pro	Leu	Ala	Pro	Gly	Gly	Thr	Gln	Met	Lys	Lys	Lys	Ser	Gly	Phe
		115					120					125			
Gln	Ile	Thr	Ser	Val	Thr	Pro	Ala	Gln	Ile	Ser	Ala	Ser	Ile	Ser	Ser
	130					135					140				
Asn	Asn	Ser	Ile	Ala	Glu	Asp	Thr	Glu	Ser	Tyr	Asp	Asp	Leu	Asp	Glu
145					150					155					160
Ser	His	Thr	Glu	Asp	Leu	Ser	Ser	Ser	Glu	Ile	Leu	Asp	Val	Ser	Leu
				165					170					175	
Ser	Arg	Ala	Thr	Asp	Leu	Gly	Glu	Pro	Glu	Arg	Ser	Ser	Ser	Glu	Glu
		180						185						190	
Thr	Leu	Asn	Asn	Phe	Gln	Glu	Ala	Glu	Thr	Pro	Gly	Ala	Val	Ser	Pro
		195					200					205			
Asn	Gln	Pro	His	Leu	Pro	Gln	Pro	His	Leu	Pro	His	Leu	Pro	Gln	Gln
	210					215					220				
Asn	Val	Val	Ile	Asn	Gly	Asn	Ala	His	Pro	His	His	Leu	His	His	His
225					230					235					240
His	Gln	Ile	His	His	Gly	His	His	Leu	Gln	His	Gly	His	His	His	Pro
				245					250					255	
Ser	His	Val	Ala	Val	Ala	Ser	Ala	Ser	Ile	Thr	Gly	Gly	Pro	Pro	Ser
		260						265					270		
Ser	Pro	Val	Ser	Arg	Lys	Leu	Ser	Thr	Thr	Gly	Ser	Ser	Asp	Ser	Ile
	275						280						285		
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<400> 2862
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20 25 30
Ser Glu Ala Leu Ala Val Ile Asn Asn Gly Asn Lys Gly Pro Pro Val
35 40 45
Gly Ser Arg Ile Ser Met Pro Thr Thr Lys Pro Arg Pro Gly Leu Arg

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<210> 2863
<211> 711
<212> DNA
<213> Homo sapiens
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120
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gcaccaactc aactgttttt tcctctcatc cgtaactgtg aactgagcag gatctatggc
240
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300
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660

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<210> 2864

<211> 237

<212> PRT

<213> Homo sapiens

<400> 2864

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Ser Gly Arg Ile Val Trp Ser Pro Ala Val Pro Gly Ile Pro Val Arg
35 40 45
Ser Ser Ser Leu Pro Leu Phe Ser Asp Ala Met Pro Ala Pro Thr Gln
50 55 60
Leu Phe Phe Pro Leu Ile Arg Asn Cys Glu Leu Ser Arg Ile Tyr Gly
65 70 75 80
Thr Ala Cys Tyr Cys His His Lys His Leu Cys Cys Ser Ser Ser Tyr
85 90 95
Ile Pro Gln Ser Arg Leu Arg Tyr Thr Pro His Pro Ala Tyr Ala Thr
100 105 110
Phe Cys Arg Pro Lys Glu Asn Trp Trp Gln Tyr Thr Gln Gly Arg Arg
115 120 125
Tyr Ala Ser Thr Pro Gln Lys Phe Tyr Leu Thr Pro Pro Gln Val Asn
130 135 140
Ser Ile Leu Lys Ala Asn Glu Tyr Ser Phe Lys Val Pro Glu Phe Asp
145 150 155 160
Gly Lys Asn Val Ser Ser Ile Leu Gly Phe Asp Ser Asn Gln Leu Pro
165 170 175
Ala Asn Ala Pro Ile Glu Asp Arg Arg Ser Ala Ala Thr Cys Leu Gln
180 185 190
Thr Arg Gly Met Leu Leu Gly Val Phe Asp Gly His Ala Gly Cys Ala
195 200 205
Cys Ser Gln Ala Val Ser Glu Arg Leu Phe Tyr Tyr Ile Ala Val Ser
210 215 220
Leu Leu Pro His Glu Thr Leu Leu Glu Ile Glu Asn Ala
225 230 235

<210> 2865

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2865

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<211> 134

<212> PRT

<213> Homo sapiens

<400> 2866

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His	Glu	Thr	His	Ala	Glu	Glu	Thr	Pro	Asn	Gln	Pro	Phe	Asn	Ser	Val
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His	Leu	Phe	Ser	Phe	Met	Val	Leu	Ala	Leu	Asn	Val	Val	Thr	Val	Ala
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Thr	Ile	Thr	Val	Arg	His	Phe	Val	Asn	Gln	Arg	Ala	Asp	Tyr	Lys	Tyr
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<211> 444

<212> DNA

<213> Homo sapiens

<400> 2867

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<400> 2868
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 35 40 45
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 His Cys Cys His Ser Arg Leu Val Ala Ala Ala Pro Arg Pro Cys Trp
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<400> 2869
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<211> 258

<212> PRT

<213> Homo sapiens

<400> 2870

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Val	Met	Glu	Met	Ile	Ala	Ala	Leu	Gly	Pro	Gly	Pro	Ser	Pro	Tyr	Pro
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Pro	Gly	Gly	Thr	Ser	Met	Asn	Asp	Phe	Met	His	Gly	Pro	Pro	Gln	Leu
			100					105					110		
Ser	His	Pro	Pro	Asp	Met	Pro	Asn	Asn	Met	Ala	Ala	Leu	Glu	Lys	Pro
		115					120						125		
Leu	Ser	His	Pro	Met	Gln	Glu	Thr	Met	Pro	His	Ala	Gly	Ser	Ser	Asp
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Gln	Pro	His	Pro	Ser	Ile	Gln	Gln	Gly	Leu	His	Val	Pro	His	Pro	Ser
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			165					170						175	
Pro	Ser	Gln	Pro	Pro	Arg	Gln	Pro	Pro	Gln	Ala	Ala	Pro	Ser	Ser	His
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Pro	His	Ser	Asp	Leu	Thr	Phe	Asn	Pro	Ser	Ser	Ala	Leu	Glu	Gly	Gln
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Ala	Gly	Ala	Gln	Gly	Ala	Ser	Asp	Met	Pro	Glu	Pro	Ser	Leu	Asp	Leu
		210					215					220			
Leu	Pro	Glu	Leu	Thr	Asn	Pro	Asp	Glu	Leu	Leu	Ser	Tyr	Leu	Asp	Pro
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<211> 786

<212> DNA

<213> Homo sapiens

<400> 2871

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<211> 153

<212> PRT

<213> Homo sapiens

<400> 2872

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			20					25					30		
Ile	Ser	Pro	Asp	Ala	Phe	Phe	Gln	Ile	Asn	Thr	Ala	Gly	Ala	Glu	Met
			35				40					45			
Leu	Tyr	Trp	Thr	Val	Gly	Glu	Leu	Thr	Gly	Val	Asn	Ser	Asp	Thr	Ile
			50			55				60					
Leu	Leu	Asp	Ile	Cys	Cys	Gly	Thr	Gly	Val	Ile	Gly	Leu	Pro	Leu	Ala
65				70				75						80	
Gln	His	Thr	Ser	Arg	Val	Leu	Gly	Ile	Glu	Leu	Leu	Glu	Gln	Ala	Val
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Glu	Asp	Ala	Arg	Trp	Thr	Ala	Ala	Phe	Asn	Gly	Ile	Thr	Asn	Ser	Glu
			100				105					110			
Phe	His	Thr	Gly	Gln	Ala	Glu	Lys	Ile	Leu	Pro	Gly	Leu	Leu	Lys	Ser
			115				120					125			
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<210> 2873
 <211> 1187
 <212> DNA
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<210> 2874
 <211> 248
 <212> PRT

<213> Homo sapiens

<400> 2874

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 Pro Gly Leu Leu Ile Ala Phe Ser Ala Cys Thr Thr Val Leu Val Ala
 65 70 75 80
 Gly His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro Asn Ile
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 Glu Ala Val Ser Asn Cys Thr Ile Ser Thr Arg Lys Glu Ser Pro His
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 Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe Ser Thr Val
 115 120 125
 Ile Gly Thr Leu Leu Phe Leu Ala Glu Val Val Leu Leu Cys Trp Val
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 Lys Pro Pro Ala Ser Gly Ala Ala Ala Asn Val Ser Thr Ser Gly Ile
 165 170 175
 Thr Pro Gly Gln Ala Ala Ala Ile Ala Ser Thr Thr Ile Met Val Pro
 180 185 190
 Phe Gly Leu Ile Phe Ile Val Phe Ala Val His Phe Tyr Arg Ser Leu
 195 200 205
 Val Ser His Lys Thr Asp Arg Gln Phe Gln Glu Leu Asn Glu Leu Ala
 210 215 220
 Glu Phe Ala Arg Leu Gln Asp Gln Leu Asp His Arg Gly Asp His Pro
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<210> 2875

<211> 593

<212> DNA

<213> Homo sapiens

<400> 2875

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<210> 2876

<211> 193

<212> PRT

<213> Homo sapiens

<400> 2876

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 145 150 155 160
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<212> DNA

<213> Homo sapiens

<400> 2877

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<210> 2878
 <211> 451
 <212> PRT
 <213> Homo sapiens

<400> 2878
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 Val Asp Asn Pro Val Gly Thr Gly Phe Ser Tyr Val Asn Gly Ser Gly
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 Asn Lys Gly Leu Tyr Arg Glu Ala Thr Glu Leu Trp Gly Lys Ala Glu
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 Met Ile Ile Glu Gln Asn Thr Asp Gly Val Asn Phe Tyr Asn Ile Leu
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 Thr Lys Ser Thr Pro Thr Ser Thr Met Glu Ser Ser Leu Glu Phe Thr
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 Gln Ser His Leu Val Cys Leu Cys Gln Arg His Val Arg His Leu Gln
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 Lys Ile Ile Pro Glu Asp Gln Ser Trp Gly Gly Gln Ala Thr Asn Val

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<212> DNA

<213> Homo sapiens

<400> 2879

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<211> 376

<212> PRT

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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Pro	Ser	Ser	Val	Asp	Thr	Tyr	Pro	Tyr	Gly	Leu	Pro	Thr	Pro	Pro	Glu
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Pro	Cys	Gln	Glu	Glu	His	Gly	His	Pro	Arg	Arg	Ile	Pro	His	Leu	Pro
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<211> 807

<212> DNA

<213> Homo sapiens

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<211> 269

<212> PRT

<213> Homo sapiens

<400> 2886

Lys	Leu	Gln	Gly	Ile	Gly	His	Phe	Xaa	Asn	Thr	Ile	Arg	Glu	Met	Phe
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		20						25					30		
Gly	Arg	Asp	Ala	Glu	Thr	Leu	Gln	Lys	Gln	Lys	Glu	Thr	Ile	Lys	Ala
		35					40					45			
Phe	Leu	Lys	Lys	Leu	Glu	Ala	Leu	Ile	Ala	Ser	Asn	Asp	Asn	Ala	Asn
	50					55					60				
Lys	Thr	Cys	Lys	Met	Met	Leu	Ala	Thr	Glu	Glu	Thr	Ser	Pro	Asp	Leu
65				70					75					80	
Val	Gly	Ile	Lys	Arg	Asp	Leu	Glu	Ala	Leu	Ser	Lys	Gln	Cys	Asn	Lys
			85					90					95		
Leu	Leu	Asp	Arg	Ala	Gln	Ala	Arg	Glu	Glu	Gln	Val	Glu	Gly	Thr	Ile
		100						105					110		
Lys	Arg	Leu	Glu	Glu	Phe	Tyr	Ser	Lys	Leu	Lys	Glu	Phe	Ser	Ile	Leu
		115					120					125			
Leu	Gln	Lys	Ala	Glu	Glu	His	Glu	Glu	Ser	Gln	Gly	Pro	Val	Gly	Met
	130					135					140				
Glu	Thr	Glu	Thr	Ile	Asn	Gln	Gln	Leu	Asn	Met	Phe	Lys	Val	Phe	Gln
145				150					155					160	
Lys	Glu	Glu	Ile	Glu	Pro	Leu	Gln	Gly	Lys	Gln	Gln	Asp	Val	Asn	Trp
			165					170					175		
Leu	Gly	Gln	Gly	Leu	Ile	Gln	Ser	Ala	Ala	Lys	Ser	Thr	Ser	Thr	Gln
		180						185					190		
Gly	Leu	Glu	His	Asp	Leu	Asp	Asp	Val	Asn	Ala	Arg	Trp	Lys	Thr	Leu
		195				200						205			
Asn	Lys	Lys	Val	Ala	Gln	Arg	Ala	Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu
	210				215						220				
His	Cys	Gly	Arg	Phe	Gln	Asp	Ala	Leu	Glu	Ser	Leu	Leu	Ser	Trp	Met

225		230		235		240									
Val	Asp	Thr	Glu	Glu	Leu	Val	Ala	Asn	Gln	Lys	Pro	Pro	Ser	Ala	Glu
			245						250					255	
Phe	Lys	Val	Val	Lys	Asp	Lys	Ile	Gln	Glu	Gln	Lys	Leu			
			260					265							

<210> 2887
 <211> 1945
 <212> DNA
 <213> Homo sapiens

<400> 2887
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 120
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 180
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 240
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 360
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 420
 tgtgtctcga gtaggggtgc tccctccttc ccgggcgatg ggctggactc tggccttgcc
 480
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 600
 gtgtcccagg gcttcactga attcacaatt gaggatttcc acaacacgtt catggacctg
 660
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 720
 agcacctccg actaccttgt ggtctacctg cggctgctca cctcgggcta cctgcagcgc
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 960
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 1020
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 1080
 gccagggcgt agacatgtac agagggtttt ctgtggttgt aaatggctct atttcacccc
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 1200
 gtgtgtgcgt gtccctgctc tgtgtcccgc ctggctgctc tgtctgctgc cccctcccc
 1260

caggtgggtc cccctgcttt tcacctatct actcctgagc ttccccaaca ggagcaggtt
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 1440
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 1500
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 1560
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 1620
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 1800
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 1920
 aaaaaaaaaa aaaaaaaaaa aaaaa
 1945

<210> 2888

<211> 315

<212> PRT

<213> Homo sapiens

<400> 2888

Met	Met	Lys	Pro	Ser	Trp	Leu	Ser	Arg	Thr	Glu	Phe	Ser	Lys	Arg	Leu
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Leu	Cys	Arg	Thr	Leu	Trp	Cys	Gln	Ser	Gly	Trp	Ser	Ser	Arg	Ser	Tyr
			20					25					30		
Thr	Arg	Ser	Met	Leu	Lys	Met	Thr	Thr	Ser	Ile	Asn	Arg	Arg	Ser	Arg
		35					40					45			
Thr	Ser	Thr	Lys	Ser	Thr	Arg	Thr	Ser	Ala	Arg	Pro	Gly	Leu	Thr	Ala
	50					55				60					
Thr	Val	Ser	Ile	Gly	Leu	Ser	Asp	Ser	Pro	Thr	Trp	Arg	His	Cys	Trp
65					70				75					80	
Met	Thr	Ala	Arg	Ser	Cys	Ser	Gly	Glu	Lys	Gly	Gly	His	Trp	Ala	Pro
			85					90					95		
Arg	Gln	Val	Gly	Val	Tyr	Leu	Leu	Pro	Gly	Arg	Val	Gly	Cys	Val	Ser
		100						105					110		
Ser	Arg	Val	Ser	Pro	Ser	Phe	Pro	Gly	Asp	Gly	Leu	Asp	Ser	Gly	Leu
		115					120					125			
Ala	Arg	Arg	Gly	Ser	Ala	Val	Ser	Ala	Leu	Ala	Ser	Gly	Leu	Val	Glu
	130					135					140				
Glu	Pro	Met	Leu	Gly	Pro	Pro	Phe	His	Pro	Thr	Pro	Arg	Phe	Lys	Ala
145					150					155				160	
Val	Ser	Ala	Lys	Ser	Lys	Glu	Asp	Leu	Val	Ser	Gln	Gly	Phe	Thr	Glu
			165					170					175		
Phe	Thr	Ile	Glu	Asp	Phe	His	Asn	Thr	Phe	Met	Asp	Leu	Ile	Glu	Gln


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      180      185      190
Val Glu Lys Gln Thr Ser Val Ala Asp Leu Leu Ala Ser Phe Asn Asp
      195      200      205
Gln Ser Thr Ser Asp Tyr Leu Val Val Tyr Leu Arg Leu Leu Thr Ser
      210      215      220
Gly Tyr Leu Gln Arg Glu Ser Lys Phe Phe Glu His Phe Ile Glu Gly
225      230      235      240
Gly Arg Thr Val Lys Glu Phe Cys Gln Gln Glu Val Glu Pro Met Cys
      245      250      255
Lys Glu Ser Asp His Ile His Ile Ile Ala Leu Ala Gln Ala Leu Ser
      260      265      270
Val Ser Ile Gln Val Glu Tyr Met Asp Arg Gly Glu Gly Gly Thr Thr
      275      280      285
Asn Pro His Ile Phe Pro Glu Gly Ser Glu Pro Lys Val Tyr Leu Leu
      290      295      300
Tyr Arg Pro Gly His Tyr Asp Ile Leu Tyr Lys
305      310      315

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<210> 2889

<211> 614

<212> DNA

<213> Homo sapiens

<400> 2889

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120
ccggagggtgc agctaaaggc caccaaggca gaacaggcag aagggatgga atttggcttc
180
aagatgcccc agatgacat gcccaagcta gggagggcag agtccccatc acgtggcaag
240
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300
gaggtggatg gtgaggctca tgtgggtgtc ccctctctca ctctgccttc agtggagcta
360
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420
gagcggggcg agggccccga ggtggcagca ggggtcaggg aagtgggctt ccgagtggcc
480
tctgttgaaa ttgtcacccc acagctgccc gccgtggaaa ttgaggaagg gcggctggag
540
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600
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614

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<210> 2890

<211> 204

<212> PRT

<213> Homo sapiens

<400> 2890

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Val His Leu Pro Glu Val Gln Leu Pro Lys Val Ser Glu Ile Arg Leu

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Pro Glu Met Gln Val Xaa Glu Val Pro Asp Val His Leu Pro Lys Xaa
20           25           30
Pro Glu Val Lys Leu Pro Arg Ala Pro Glu Val Gln Leu Lys Ala Thr
35           40           45
Lys Ala Glu Gln Ala Glu Gly Met Glu Phe Gly Phe Lys Met Pro Lys
50           55           60
Met Thr Met Pro Lys Leu Gly Arg Ala Glu Ser Pro Ser Arg Gly Lys
65           70           75           80
Pro Gly Glu Ala Gly Ala Glu Val Ser Gly Lys Leu Val Thr Leu Pro
85           90           95
Cys Leu Gln Pro Glu Val Asp Gly Glu Ala His Val Gly Val Pro Ser
100          105          110
Leu Thr Leu Pro Ser Val Glu Leu Asp Leu Pro Gly Ala Leu Gly Leu
115          120          125
Gln Gly Gln Val Pro Ala Ala Lys Met Gly Lys Gly Glu Arg Ala Glu
130          135          140
Gly Pro Glu Val Ala Ala Gly Val Arg Glu Val Gly Phe Arg Val Pro
145          150          155          160
Ser Val Glu Ile Val Thr Pro Gln Leu Pro Ala Val Glu Ile Glu Glu
165          170          175
Gly Arg Leu Glu Met Ile Glu Thr Lys Val Lys Pro Ser Ser Lys Phe
180          185          190
Ser Leu Pro Lys Phe Gly Leu Ser Gly Pro Lys Val
195          200

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<210> 2891

<211> 565

<212> DNA

<213> Homo sapiens

<400> 2891

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120
ccaaccaacc aacaaaacta aaagtgtatc tgacacagtt caggtgataa gcaggaaaat
180
gggattatca gacaccggct ctttggcaca cactgcgaag tcagcccctc tgcccagtct
240
ggaaaagcaa cggcgtaagt caatgtgatg aagagggtcca gcctctcgtc gggaaacttg
300
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360
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420
tcttaacaac atggggacga ggtgggcgca cctttccaaa gtggactgtg atttggccgc
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565

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<210> 2892

<211> 90
 <212> PRT
 <213> Homo sapiens

<400> 2892
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 20 25 30
 Ser Thr Ser Tyr Arg Lys Ala Leu Pro Ile Leu Arg Pro Ser Ser Arg
 35 40 45
 Arg Glu Ala Gly Pro Leu His His Ile Asp Leu Arg Arg Cys Phe Ser
 50 55 60
 Arg Leu Gly Arg Gly Ala Asp Phe Ala Val Cys Ala Lys Glu Pro Val
 65 70 75 80
 Ser Asp Asn Pro Ile Phe Leu Leu Ile Thr
 85 90

<210> 2893
 <211> 2270
 <212> DNA
 <213> Homo sapiens

<400> 2893
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 120
 tcaattctgg cctgtgctct tctagggaga ctagatgtat gcaccacca gaaactgcca
 180
 gtagggagca ccctacaggc atgacttggc agctaggcca tgtttatttc ccttggtggg
 240
 gcaccgaca ggcagagttt attccctcag cttgggggtg gcagtgggtg tggtagtgct
 300
 aggggttact gcaggcaggt ttctgtttct ttgcatcccg ggactggctt gttctcacct
 360
 ttttgttctg tccctctctg gtgtatttac tttctctctt tttgcattgt tctcagcctt
 420
 ccatctgcat ctcttcatct ctgcctctct tgctgcatt tctcaatct tgattgtccc
 480
 tgctcttcc tctgccattc cctctcttcc cctcagttct gtggctctgc ctccctgtct
 540
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 720
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960
cgcagggaag ctgcctttcg aagcatgctg aggcaggctg tgcctgctct ggagctaggg
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1140
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1200
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1320
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1440
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2100
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2220
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2270

<210> 2894

<211> 490

<212> PRT

<213> Homo sapiens

<400> 2894

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			20					25					30		
Gln	Val	Ser	Val	Ser	Leu	His	Pro	Gly	Thr	Gly	Leu	Phe	Ser	Pro	Phe
		35					40					45			
Cys	Ser	Val	Pro	Leu	Trp	Cys	Ile	Tyr	Phe	Leu	Ser	Phe	Cys	Ile	Val
	50					55					60				
Leu	Ser	Leu	Pro	Ser	Ala	Ser	Leu	His	Leu	Cys	Leu	Ser	Cys	Leu	His
65					70					75					80
Phe	Leu	Asn	Leu	Asp	Cys	Pro	Cys	Leu	Phe	Leu	Cys	His	Ser	Leu	Ser
				85					90					95	
Ser	Pro	Ser	Val	Cys	Gly	Ser	Ala	Ser	Leu	Ser	His	Ser	Pro	Tyr	Asn
			100					105					110		
Trp	Pro	Leu	Pro	Ala	Gln	Thr	Phe	Leu	Asp	Glu	Leu	His	Glu	Thr	Gly
		115					120					125			
Gln	Leu	His	Ser	Met	Ser	Thr	Trp	Met	Glu	Leu	Tyr	Pro	Ala	Val	Ser
	130					135					140				
Thr	Asp	Val	Arg	Phe	Ala	Asn	Met	Leu	Gly	Gln	Pro	Gly	Ser	Thr	Pro
145					150					155					160
Leu	Asp	Leu	Phe	Lys	Phe	Tyr	Val	Glu	Glu	Leu	Lys	Ala	Arg	Phe	His
				165					170					175	
Asp	Glu	Lys	Lys	Ile	Ile	Lys	Asp	Ile	Leu	Lys	Asp	Arg	Gly	Phe	Cys
		180						185					190		
Val	Glu	Val	Asn	Thr	Ala	Phe	Glu	Asp	Phe	Ala	His	Val	Ile	Ser	Phe
	195						200					205			
Asp	Lys	Arg	Ala	Ala	Ala	Leu	Asp	Ala	Gly	Asn	Ile	Lys	Leu	Thr	Phe
	210					215					220				
Asn	Ser	Leu	Leu	Glu	Lys	Ala	Glu	Ala	Arg	Glu	Arg	Glu	Arg	Glu	Lys
225					230					235					240
Glu	Glu	Ala	Arg	Arg	Met	Arg	Arg	Arg	Glu	Ala	Ala	Phe	Arg	Ser	Met
				245					250					255	
Leu	Arg	Gln	Ala	Val	Pro	Ala	Leu	Glu	Leu	Gly	Thr	Ala	Trp	Glu	Glu
		260						265					270		
Val	Arg	Glu	Arg	Phe	Val	Cys	Asp	Ser	Ala	Phe	Glu	Gln	Ile	Thr	Leu
	275						280					285			
Glu	Ser	Glu	Arg	Ile	Arg	Leu	Phe	Arg	Glu	Phe	Leu	Gln	Val	Leu	Glu
	290					295					300				
Thr	Glu	Cys	Gln	His	Leu	His	Thr	Lys	Gly	Arg	Lys	His	Gly	Arg	Lys
305				310						315					320
Gly	Lys	Lys	His	His	His	Lys	Arg	Ser	His	Ser	Pro	Ser	Gly	Ser	Glu
				325					330					335	
Ser	Glu	Glu	Glu	Glu	Leu	Pro	Pro	Pro	Ser	Leu	Arg	Pro	Pro	Lys	Arg
			340					345					350		
Arg	Arg	Arg	Asn	Pro	Ser	Glu	Ser	Gly	Ser	Glu	Pro	Ser	Ser	Ser	Leu
		355					360					365			
Asp	Ser	Val	Glu	Ser	Gly	Gly	Ala	Ala	Leu	Gly	Gly	Arg	Gly	Ser	Pro
	370					375					380				
Ser	Ser	His	Leu	Leu	Gly	Ala	Asp	His	Gly	Leu	Arg	Lys	Ala	Lys	Lys
385				390					395						400
Pro	Lys	Lys	Lys	Thr	Lys	Lys	Arg	Arg	His	Lys	Ser	Asn	Ser	Pro	Glu
				405					410					415	
Ser	Glu	Thr	Asp	Pro	Glu	Glu	Lys	Ala	Gly	Lys	Glu	Ser	Asp	Glu	Lys
			420					425					430		
Glu	Gln	Glu	Gln	Asp	Lys	Asp	Arg	Glu	Leu	Gln	Gln	Ala	Glu	Leu	Pro

435 440 445
 Asn Arg Ser Pro Gly Phe Gly Ile Lys Lys Glu Lys Thr Gly Trp Asp
 450 455 460
 Thr Ser Glu Ser Glu Leu Ser Glu Gly Glu Leu Glu Arg Arg Arg Arg
 465 470 475 480
 Thr Leu Leu Gln Gln Leu Asp Asp His Gln
 485 490

<210> 2895
 <211> 697
 <212> DNA
 <213> Homo sapiens

<400> 2895
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 120
 tgcaggcggg agcacgtctc cagcatcaac ctgaagtccg ccacgaactc ggtgatgccc
 180
 ccgtactggc cgctggcgaa cttctcttcc atctgcagca gacacatgcc ctgtccgggc
 240
 tgctgcggga aggcgcgacc gcccggccc ccgctgcgcg gcccttctgc cacctcctcc
 300
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 360
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 420
 gctccttgca gcaaccgcct ccgaccccca tcgctcccat ctcttctctc tgategtccg
 480
 cgctctccag cgaggaggca ctcttccgt gggccggccc tgaggtctgg gccgccgtg
 540
 ccacctctc ctgctgtcc tctcttcgg ccgccggtgg cggccgctct tctccccag
 600
 ccggtcccat cgctcccggc gtcccgggca cactcatgcc ccggcaggcc taggctgggc
 660
 ggtgtggaac agccgctcga ggtgctgggg gacgcgt
 697

<210> 2896
 <211> 174
 <212> PRT
 <213> Homo sapiens

<400> 2896
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 His Met Pro Cys Pro Gly Cys Cys Gly Lys Ala Arg Pro Pro Arg Pro
 20 25 30
 Pro Leu Arg Gly Pro Ser Ala Thr Ser Ser Cys Arg Gly Gly Asn Ala
 35 40 45
 Pro Gln Gly Leu Gln Lys Gly Gly Gly Glu Ala Pro Val Leu Leu Leu
 50 55 60
 Gln Glu Leu Ala Gln Asp Ala Val Ala Pro Ala Val Ala Arg Arg Ser

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65          70          75          80
Ala Pro Ala Pro Cys Ser Asn Arg Leu Arg Ser Pro Ser Pro Pro Ser
          85          90          95
Leu Pro Pro Asp Arg Pro Arg Pro Pro Ala Arg Arg His Ser Phe Arg
          100          105          110
Gly Pro Ala Leu Arg Ser Gly Pro Pro Leu Pro Pro Pro Pro Arg Arg
          115          120          125
Pro Leu Leu Arg Pro Pro Val Ala Ala Ala Leu Pro Pro Gln Pro Ala
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Pro Ser Leu Pro Ala Ser Arg Ala His Ser Cys Pro Gly Arg Pro Arg
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Leu Gly Gly Val Glu Gln Pro Leu Glu Val Leu Gly Asp Ala
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<210> 2897

<211> 3184

<212> DNA

<213> Homo sapiens

<400> 2897

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<210> 2898

<211> 933

<212> PRT

<213> Homo sapiens

<400> 2898

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			20					25					30		
Asn	Glu	Cys	Val	Gln	Cys	Glu	Phe	Asn	Phe	Ile	Asn	Thr	Gly	Lys	Phe
			35				40					45			
Thr	Phe	Ser	Phe	Gln	Ala	Gln	Leu	Cys	Gly	Ser	Lys	Thr	Leu	Leu	Gln
	50					55					60				
Tyr	Leu	Glu	Phe	Ser	Pro	Ile	Asp	Ser	Thr	Val	Asp	Val	Gly	Gln	Ser
65					70					75				80	
Val	His	Ala	Thr	Leu	Ser	Phe	Gln	Pro	Leu	Lys	Lys	Cys	Val	Leu	Thr
				85					90					95	
Asp	Leu	Glu	Leu	Ile	Ile	Lys	Ile	Ser	His	Gly	Pro	Thr	Phe	Met	Cys
			100					105					110		
Asn	Ile	Ser	Gly	Cys	Ala	Val	Ser	Pro	Ala	Ile	His	Phe	Ser	Phe	Thr
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Ser	Tyr	Asn	Phe	Gly	Thr	Cys	Phe	Ile	Tyr	Gln	Ala	Gly	Met	Pro	Pro
		130				135					140				
Tyr	Lys	Gln	Thr	Leu	Val	Ile	Thr	Asn	Lys	Glu	Glu	Thr	Pro	Met	Ser
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Ile	Asp	Cys	Leu	Tyr	Thr	Asn	Thr	Thr	His	Leu	Glu	Val	Asn	Ser	Arg
			165					170					175		
Val	Asp	Val	Val	Lys	Pro	Gly	Asn	Thr	Leu	Glu	Ile	Pro	Ile	Thr	Phe
			180					185					190		
Tyr	Pro	Arg	Glu	Ser	Ile	Asn	Tyr	Gln	Glu	Leu	Ile	Pro	Phe	Glu	Ile
		195				200					205				
Asn	Gly	Leu	Ser	Gln	Gln	Thr	Val	Glu	Ile	Lys	Gly	Lys	Gly	Thr	Glu

210	215	220
Met Lys Ile Leu Val	Leu Asp Pro Ala Asn Arg	Ile Val Lys Leu Gly
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Ala Val Leu Pro Gly	Gln Val Val Lys Arg Thr	Val Ser Ile Met Asn
245	250	255
Asn Ser Leu Ala Gln	Leu Thr Phe Asn Gln Ser	Ile Leu Phe Thr Ile
260	265	270
Pro Glu Leu Gln Glu	Pro Lys Val Leu Thr	Leu Ala Pro Phe His Asn
275	280	285
Ile Thr Leu Lys Pro	Lys Glu Val Cys Lys	Leu Glu Val Ile Phe Ala
290	295	300
Pro Lys Lys Arg Val	Pro Pro Phe Ser Glu	Glu Val Phe Met Glu Cys
305	310	315
Met Gly Leu Leu Arg	Pro Leu Phe Leu Leu	Ser Gly Cys Cys Gln Ala
325	330	335
Leu Glu Ile Ser Leu	Asp Gln Glu His Ile	Pro Phe Gly Pro Val Val
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Tyr Gln Thr Gln Ala	Thr Arg Arg Ile Leu	Met Leu Asn Thr Gly Asp
355	360	365
Val Gly Ala Arg Phe	Lys Trp Asp Ile Lys	Lys Phe Glu Pro His Phe
370	375	380
Ser Ile Ser Pro Glu	Glu Gly Tyr Ile Thr	Ser Gly Met Glu Val Ser
385	390	395
Phe Glu Val Thr Tyr	His Pro Thr Glu Val	Gly Lys Glu Ser Leu Cys
405	410	415
Lys Asn Ile Leu Cys	Tyr Ile Gln Gly Gly	Ser Pro Leu Ser Leu Thr
420	425	430
Leu Ser Gly Val Cys	Val Gly Pro Pro Ala	Val Lys Glu Val Val Asn
435	440	445
Phe Thr Cys Gln Val	Arg Ser Lys His Thr	Gln Thr Ile Leu Leu Ser
450	455	460
Asn Arg Thr Asn Gln	Thr Trp Asn Leu His	Pro Ile Phe Glu Gly Glu
465	470	475
His Trp Glu Gly Pro	Glu Phe Ile Thr Leu	Glu Ala His Gln Gln Asn
485	490	495
Lys Pro Tyr Glu Ile	Thr Tyr Arg Pro Arg	Thr Met Asn Leu Glu Asn
500	505	510
Arg Lys His Gln Gly	Thr Leu Phe Phe Pro	Leu Pro Asp Gly Thr Gly
515	520	525
Trp Leu Tyr Ala Leu	His Gly Thr Ser Glu	Leu Pro Lys Ala Val Ala
530	535	540
Asn Ile Tyr Arg Glu	Val Pro Cys Lys Thr	Pro Tyr Thr Glu Leu Leu
545	550	555
Pro Ile Thr Asn Trp	Leu Asn Lys Pro Gln	Arg Phe Arg Val Ile Val
565	570	575
Glu Ile Leu Lys Pro	Glu Lys Pro Asp Leu	Ser Ile Thr Met Lys Gly
580	585	590
Leu Asp Tyr Ile Asp	Val Leu Ser Gly Ser	Lys Lys Asp Tyr Lys Leu
595	600	605
Asn Phe Phe Ser His	Lys Glu Gly Thr Tyr	Ala Ala Lys Val Ile Phe
610	615	620
Arg Asn Glu Val Thr	Asn Glu Phe Leu Tyr	Tyr Asn Val Ser Phe Arg
625	630	635
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645 650 655
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 660 665 670
 Ser Val Thr Phe Ser Thr Glu Cys Arg Met Pro Asp Ile Ala Leu Pro
 675 680 685
 Ser Gln Phe Val Val Pro Ala Asn Ser Glu Gly Thr Phe Ser Phe Glu
 690 695 700
 Phe Gln Pro Leu Lys Ala Gly Glu Thr Phe Gly Arg Leu Thr Leu His
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 Asn Thr Asp Leu Gly Tyr Tyr Gln Tyr Glu Leu Tyr Leu Lys Ala Thr
 725 730 735
 Pro Ala Leu Pro Glu Lys Pro Val His Phe Gln Thr Val Leu Gly Ser
 740 745 750
 Ser Gln Ile Ile Leu Val Lys Phe Ile Asn Tyr Thr Arg Gln Arg Thr
 755 760 765
 Glu Tyr Tyr Cys Arg Thr Asp Cys Thr Asp Phe His Ala Glu Lys Leu
 770 775 780
 Ile Asn Ala Ala Pro Gly Gly Gln Gly Gly Thr Glu Ala Ser Val Glu
 785 790 795 800
 Val Leu Phe Glu Pro Ser His Leu Gly Glu Thr Lys Gly Ile Leu Ile
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 Leu Ser Ser Leu Ala Gly Gly Glu Tyr Ile Ile Pro Leu Phe Gly Met
 820 825 830
 Ala Leu Pro Pro Lys Pro Gln Gly Pro Phe Ser Ile Arg Ala Gly Tyr
 835 840 845
 Ser Ile Ile Ile Pro Phe Lys Asn Val Phe Tyr His Met Val Thr Phe
 850 855 860
 Ser Ile Ile Val Asp Asn Pro Ala Phe Thr Ile Arg Ala Gly Glu Ser
 865 870 875 880
 Val Arg Pro Lys Lys Ile Asn Asn Ile Thr Val Ser Phe Glu Gly Asn
 885 890 895
 Pro Ser Gly Ser Lys Thr Pro Ile Thr Thr Lys Leu Thr Val Ser Cys
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 Pro Pro Gly Glu Gly Ser Glu Thr Gly Val Lys Trp Val Tyr Tyr Leu
 915 920 925
 Lys Gly Ile Thr Leu
 930

<210> 2899

<211> 876

<212> DNA

<213> Homo sapiens

<400> 2899

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 180
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 240
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 300

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<210> 2900

<211> 189

<212> PRT

<213> Homo sapiens

<400> 2900

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			20				25						30		
Asp	Glu	Ser	Ser	Val	Lys	Lys	Met	Ile	Leu	Thr	Phe	Glu	Lys	Arg	Ser
		35					40					45			
Tyr	Lys	Asn	Gln	Glu	Leu	Arg	Ile	Lys	Phe	Pro	Asp	Asn	Pro	Glu	Lys
		50				55				60					
Phe	Met	Glu	Ser	Glu	Leu	Asp	Leu	Asn	Asp	Ile	Ile	Gln	Glu	Met	His
65				70					75					80	
Val	Val	Ala	Thr	Met	Pro	Asp	Leu	Tyr	His	Leu	Leu	Val	Glu	Leu	Asn
			85					90					95		
Ala	Val	Gln	Ser	Leu	Leu	Gly	Leu	Leu	Gly	His	Asp	Asn	Thr	Asp	Val
		100				105							110		
Ser	Ile	Ala	Val	Val	Asp	Leu	Leu	Gln	Glu	Leu	Thr	Asp	Ile	Asp	Thr
	115					120					125				
Leu	His	Glu	Ser	Glu	Glu	Gly	Ala	Glu	Val	Leu	Ile	Asp	Ala	Leu	Val
	130					135					140				
Asp	Gly	Gln	Val	Val	Ala	Leu	Leu	Val	Gln	Asn	Leu	Glu	Arg	Leu	Asp
145				150					155					160	
Glu	Ser	Val	Lys	Glu	Glu	Ala	Asp	Gly	Val	His	Asn	Thr	Leu	Ala	Ile
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Val	Glu	Asn	Met	Ala	Glu	Phe	Arg	Pro	Glu	Met	Cys	Thr			
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<210> 2901

<211> 756

<212> DNA

<213> Homo sapiens

<400> 2901

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<210> 2902

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2902

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			20					25					30		
Glu	Ser	Leu	Glu	Glu	Glu	Glu	Ala	Leu	Asp	Pro	Leu	Gly	Ile	Met	Arg
		35					40					45			
Ser	Lys	Lys	Pro	Lys	Lys	His	Pro	Lys	Val	Ala	Val	Lys	Ala	Lys	Pro
		50				55					60				
Ser	Pro	Arg	Leu	Thr	Ile	Phe	Asp	Glu	Glu	Val	Asp	Pro	Asp	Glu	Gly
65					70					75				80	
Leu	Phe	Gly	Pro	Gly	Arg	Lys	Leu	Ser	Pro	Gln	Asp	Pro	Ser	Glu	Asp
			85					90						95	
Val	Ser	Ser	Met	Asp	Pro	Leu	Lys	Leu	Phe	Asp	Asp	Pro	Asp	Leu	Gly
			100					105						110	
Gly	Ala	Ile	Pro	Leu	Gly	Asp	Ser	Leu	Leu	Leu	Pro	Ala	Ala	Cys	Glu
		115					120					125			
Ser	Gly	Gly	Pro	Thr	Pro	Ser	Leu	Ser	His	Arg	Asp	Ala	Ser	Lys	Glu

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<210> 2903
 <211> 542
 <212> DNA
 <213> Homo sapiens

<400> 2903
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 420
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 542

<210> 2904
 <211> 180
 <212> PRT
 <213> Homo sapiens

<400> 2904
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 35 40 45
 Asn Thr Arg Leu Phe Lys Glu Val Asp Gly Glu Gly Lys Pro Tyr Tyr
 50 55 60
 Glu Val Arg Leu Ala Ser Val Leu Gly Ser Glu Pro Ser Leu Asp Ser
 65 70 75 80
 Glu Val Thr Ser Lys Leu Lys Ser Tyr Glu Phe Arg Gly Ser Pro Phe
 85 90 95
 Gln Val Thr Arg Gly Asp Tyr Ala Pro Ile Leu Gln Lys Val Val Glu
 100 105 110
 Gln Leu Glu Lys Ala Lys Ala Tyr Ala Ala Asn Ser His Gln Gly Gln
 115 120 125
 Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu Ala

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His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro His Arg
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Gly Glu Val Arg Arg Gln Leu His Pro Thr Cys Pro Leu Leu Pro Ala
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Pro Pro Ser Arg
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<210> 2905

<211> 814

<212> DNA

<213> Homo sapiens

<400> 2905

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180
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360
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480
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<210> 2906

<211> 200

<212> PRT

<213> Homo sapiens

<400> 2906

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Phe Ser Tyr Pro Ser Phe Val Tyr Leu Gly Thr Phe Thr Leu Val Asp
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      20      25      30
Thr Leu Phe Gln Asn Trp Val Ser Gly Phe Leu Leu Cys Pro Gly Phe

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      35      40      45
Cys Cys Pro Pro Lys Arg Lys Thr Cys Ser Trp Ala Trp Trp Tyr Thr
  50      55      60
Ser Val Val Pro Val Thr Gln Glu Ala Glu Ala Gly Gly Leu Leu Glu
  65      70      75      80
Pro Arg Cys Ser Arg Leu Gln Trp Ala Val Asn Ala Leu Leu His Ser
      85      90      95
Ser Leu Ser Asn Arg Ala Arg Pro Arg Pro Ser Ser Arg Leu Ser Ile
      100      105      110
Pro Pro Pro Gln His Pro Phe Leu Leu Glu Met Gly Phe Gly Val Val
      115      120      125
Asn Gln Ala Gln Gly Asn Leu Arg Gly Pro Ala Ser Ser Val Arg Cys
      130      135      140
Arg Arg Ser Thr Arg Pro Arg Pro Gly Ser Ala Arg Arg Glu Lys Ala
      145      150      155      160
Ala Thr Pro Gly Val Arg Glu Leu Arg Leu Glu Gly Ala Trp Gln Ala
      165      170      175
Gly Arg Gly Pro Gly Gly Gly Ser Ala Tyr Asp Arg Arg Trp Gly Glu
      180      185      190
Leu Leu Asp Val Lys Gly Pro Leu
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<210> 2907

<211> 379

<212> DNA

<213> Homo sapiens

<400> 2907

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180
caaaggcaaa ggaattcttc ccttaatggt ggacgggtcct gagactgttc caccctgggc
240
tcattacact gggaccagct ttaagcttcc ctgttcaacg cggagagctc cacagcccag
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<210> 2908

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2908

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Met Thr Ala Ser Leu Asn Gly Trp Val Leu Arg Asn Ser Ile Phe Thr
      20      25      30
Phe Pro Arg Leu Leu Ser Asn Phe Gln His Cys Pro Gln Asp Tyr Lys

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35 40 45
 Gly Lys Gly Ile Leu Pro Leu Met Leu Asp Gly Pro Glu Thr Ala Pro
 50 55 60
 Pro Trp Ala His Tyr Thr Gly Thr Ser Phe Lys Leu Pro Cys Ser Thr
 65 70 75 80
 Arg Arg Ala Pro Gln Pro Arg Thr Thr Glu Gln Met Met Ala Arg Arg
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<210> 2909

<211> 2420

<212> DNA

<213> Homo sapiens

<400> 2909

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 480
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 720
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<210> 2910

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2910

Met Gly Thr Glu Gly Ser Lys Gly Gly Ile Arg Ser Ala Pro Lys Pro

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      20           25           30
Thr Glu Pro Pro Val Phe Cys Leu Arg Ala Ser Phe Met Ala Trp Thr
      35           40           45
Gly Asn Ala Met Cys Ser His Lys Cys Thr Thr Ile Val His Gln His
      50           55           60
Leu Tyr Asn Ile Lys Gly Val Ile Tyr Lys Ser Thr Ala Ile Val His
      65           70           75           80
Arg Met Val Met Ala Gly Glu Pro Arg Pro Pro Val Leu Cys Ser Phe
      85           90           95
Ser Thr Gly Glu His Leu Gly Ser Cys His Lys Ala Arg Gly Gly Pro
      100           105           110
Ser Leu Gly Leu Ser Trp Gly Arg Gln Gln Val Cys Lys Asp Ser Ser
      115           120           125
Gly Pro Val Leu Thr Gly Ile Arg Gly Gln Glu Arg Gln Val Cys Leu
      130           135           140
Cys Leu Gly Leu Ile Gly Arg Leu Val
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<210> 2911

<211> 1327

<212> DNA

<213> Homo sapiens

<400> 2911

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840

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 1200
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 1327

<210> 2912

<211> 350

<212> PRT

<213> Homo sapiens

<400> 2912

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 35 40 45
 Leu Leu Ser Leu Gly Thr Cys Leu Gly Leu Ala Trp Phe Val Phe Gln
 50 55 60
 Gln Ser Glu Lys Phe Ala Lys Val Glu Asn Gln Tyr Gln Leu Leu Lys
 65 70 75 80
 Leu Glu Thr Asn Glu Phe Gln Gln Leu Gln Ser Lys Ile Ser Leu Ile
 85 90 95
 Ser Glu Lys Trp Gln Lys Ser Glu Ala Ile Met Glu Gln Leu Lys Ser
 100 105 110
 Phe Gln Ile Ile Ala His Leu Lys Arg Leu Gln Glu Glu Ile Asn Glu
 115 120 125
 Val Lys Thr Trp Ser Asn Arg Ile Thr Glu Lys Gln Asp Ile Leu Asn
 130 135 140
 Asn Ser Leu Thr Thr Leu Ser Gln Asp Ile Thr Lys Val Asp Gln Ser
 145 150 155 160
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 165 170 175
 Thr Asp Ile Arg Arg Ile Ser Gly Leu Val Thr Asp Val Ile Ser Leu
 180 185 190
 Thr Asp Ser Val Gln Glu Leu Glu Lys Ile Glu Lys Val Glu Lys
 195 200 205
 Asn Thr Val Lys Asn Ile Gly Asp Leu Leu Ser Ser Ser Ile Asp Arg
 210 215 220
 Thr Ala Thr Leu Arg Lys Thr Ala Ser Glu Asn Ser Gln Arg Ile Asn

225		230		235		240
Ser Val Lys Lys Thr	Leu Thr Glu Leu Lys Ser Asp Phe Asp Lys His					
	245		250		255	
Thr Asp Arg Phe Leu Ser Leu Glu Gly Asp Arg Ala Lys Val Leu Lys						
	260		265		270	
Thr Val Thr Phe Ala Asn Asp Leu Lys Pro Lys Val Tyr Asn Leu Lys						
	275		280		285	
Lys Asp Phe Ser Arg Leu Glu Pro Leu Val Asn Asp Leu Thr Leu Arg						
	290		295		300	
Ile Gly Arg Leu Val Thr Asp Leu Leu Gln Arg Glu Lys Glu Ile Ala						
305		310		315		320
Phe Leu Ser Glu Lys Ile Ser Asn Leu Thr Ile Val Gln Ala Glu Ile						
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<210> 2913

<211> 361

<212> DNA

<213> Homo sapiens

<400> 2913

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<210> 2914

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2914

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	20					25			30						
Cys Asn Met Glu Ile Gly Ile Ile Ile Arg Asn Gly Ser Gln Asp Gly															
	35					40			45						
Pro Glu Pro Ser Ile Ser Gly Leu Lys Lys Leu His Pro Gln Leu Ser															
	50				55			60							
Leu Ser Glu Asp Val His Ala Pro Gln Val Ala Asn Asp Thr Glu Ala															
65		70				75			80						
Gly Arg Lys Leu Asp Val Gly Pro Gln Leu Leu Asp Gln Leu Ala Gln															

	85		90		95										
His	Gln	Leu	His	Gly	Leu	Ala	His	Phe	Val	His	Asp	Ala	Leu	Asp	Asp
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<210> 2915
 <211> 1782
 <212> DNA
 <213> Homo sapiens

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 240
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 300
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 1080
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<210> 2916

<211> 519

<212> PRT

<213> Homo sapiens

<400> 2916

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		20					25				30				
Ile	Gln	Glu	Val	Glu	Leu	Lys	Ala	Ser	Ala	Ala	Asp	Arg	Glu	Ile	Tyr
	35					40					45				
Leu	Leu	Arg	Thr	Ser	Leu	His	Arg	Glu	Arg	Glu	Gln	Ala	Gln	Gln	Leu
	50				55					60					
His	Gln	Leu	Leu	Ala	Leu	Lys	Glu	Gln	Glu	His	Arg	Lys	Glu	Leu	Glu
	65				70				75					80	
Thr	Arg	Glu	Phe	Phe	Thr	Asp	Ala	Asp	Phe	Gln	Asp	Ala	Leu	Ala	Lys
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Glu	Ile	Ala	Lys	Glu	Glu	Lys	Lys	His	Glu	Gln	Met	Ile	Lys	Glu	Tyr
		100						105					110		
Gln	Glu	Lys	Ile	Asp	Val	Leu	Ser	Gln	Gln	Tyr	Met	Asp	Leu	Glu	Asn
	115					120						125			
Glu	Phe	Arg	Ile	Ala	Leu	Thr	Val	Glu	Ala	Arg	Arg	Phe	Gln	Asp	Val
	130					135					140				
Lys	Asp	Gly	Phe	Glu	Asn	Val	Ala	Thr	Glu	Leu	Ala	Lys	Ser	Lys	His
	145				150					155				160	
Ala	Leu	Ile	Trp	Ala	Gln	Arg	Lys	Glu	Asn	Glu	Ser	Ser	Ser	Leu	Ile
			165					170						175	
Lys	Asp	Leu	Thr	Cys	Met	Val	Lys	Glu	Gln	Lys	Thr	Lys	Leu	Ala	Glu
		180						185					190		
Val	Ser	Lys	Leu	Lys	Gln	Glu	Thr	Ala	Ala	Asn	Leu	Gln	Asn	Gln	Ile
	195					200						205			
Asn	Thr	Leu	Glu	Ile	Leu	Ile	Glu	Asp	Asp	Lys	Gln	Lys	Ser	Ile	Gln
	210					215					220				
Ile	Glu	Leu	Leu	Lys	His	Glu	Lys	Val	Gln	Leu	Ile	Ser	Glu	Leu	Ala
	225				230					235				240	
Ala	Lys	Glu	Ser	Leu	Ile	Phe	Gly	Leu	Arg	Thr	Glu	Arg	Lys	Val	Trp
			245					250					255		
Gly	His	Glu	Leu	Ala	Gln	Gln	Gly	Ser	Ser	Leu	Ala	Gln	Asn	Arg	Gly

260 265 270
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 275 280 285
 Arg Lys Thr Asn Glu Ser Asp Ser Asp Ala Leu Arg Ile Lys Cys Lys
 290 295 300
 Ile Ile Asp Asp Gln Thr Glu Thr Ile Arg Lys Leu Lys Asp Cys Leu
 305 310 315 320
 Gln Glu Lys Asp Glu His Ile Lys Arg Leu Gln Glu Lys Ile Thr Glu
 325 330 335
 Ile Glu Lys Cys Thr Gln Glu Gln Leu Asp Glu Lys Ser Ser Gln Leu
 340 345 350
 Asp Glu Val Leu Glu Lys Leu Glu Arg His Asn Glu Arg Lys Glu Lys
 355 360 365
 Leu Lys Gln Gln Leu Lys Gly Lys Glu Val Glu Leu Glu Ile Arg
 370 375 380
 Lys Ala Tyr Ser Thr Leu Asn Arg Lys Trp His Asp Lys Gly Glu Leu
 385 390 395 400
 Leu Cys His Leu Glu Thr Gln Val Lys Glu Val Lys Glu Lys Phe Glu
 405 410 415
 Asn Lys Glu Lys Lys Leu Lys Ala Glu Arg Asp Lys Ser Ile Glu Leu
 420 425 430
 Gln Lys Asn Ala Met Glu Lys Leu His Ser Met Asp Asp Ala Phe Lys
 435 440 445
 Arg Gln Val Asp Ala Ile Val Glu Ala His Gln Ala Glu Ile Ala Gln
 450 455 460
 Leu Ala Asn Glu Lys Gln Lys Cys Ile Asp Ser Ala Asn Leu Lys Val
 465 470 475 480
 His Gln Ile Glu Lys Glu Met Arg Glu Leu Leu Glu Glu Thr Cys Lys
 485 490 495
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<210> 2917

<211> 2636

<212> DNA

<213> Homo sapiens

<400> 2917

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 180
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<210> 2918

<211> 509

<212> PRT

<213> Homo sapiens

<400> 2918

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			20					25					30		
Met	Asp	Glu	Leu	Val	Pro	Leu	Gly	Glu	Leu	Thr	Lys	His	Ser	Thr	Ser
	35						40					45			
Ala	Val	Asp	Leu	Ser	Thr	Xaa	Phe	Ala	Gln	Ile	Ser	His	Thr	Ala	Arg
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Gln	Leu	Asp	Trp	Pro	Asp	Pro	Glu	Glu	Ala	Phe	Met	Ile	Thr	Val	Lys
65				70					75					80	
Phe	Val	Glu	Asp	Thr	Cys	Arg	Leu	Ala	Leu	Val	Tyr	Cys	Ser	Leu	Ile
			85					90						95	
Lys	Ala	Arg	Ala	Arg	Glu	Leu	Ser	Ser	Gly	Gln	Lys	Asp	Gln	Gly	Gln
			100					105					110		
Ala	Ala	Asn	Met	Leu	Cys	Val	Val	Val	Asn	Asp	Met	Glu	Gln	Leu	Arg
	115						120					125			
Leu	Val	Ile	Gly	Lys	Leu	Pro	Ala	Gln	Leu	Ala	Trp	Glu	Ala	Leu	Glu
	130					135					140				
Gln	Arg	Val	Gly	Ala	Val	Leu	Glu	Gln	Gly	Gln	Leu	Gln	Asn	Thr	Leu
145				150					155					160	
His	Ala	Gln	Leu	Gln	Ser	Ala	Leu	Ala	Gly	Leu	Gly	His	Glu	Ile	Arg
			165					170					175		
Thr	Gly	Val	Arg	Thr	Leu	Ala	Glu	Gln	Leu	Glu	Val	Gly	Ile	Ala	Lys
		180					185						190		
His	Ile	Gln	Lys	Leu	Val	Gly	Val	Arg	Glu	Ser	Val	Leu	Pro	Glu	Asp
	195						200					205			
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210	215	220
Asn Thr Asn Leu Val Gln Glu Asn Phe Ser Ser Leu Leu Thr Leu Leu		
225	230	235
Trp Thr His Thr Leu Thr Val Leu Val Glu Ala Ala Ala Ser Gln Arg		240
	245	250
Ser Ser Ser Leu Ala Ser Asn Arg Leu Lys Ile Ala Leu Gln Asn Leu		255
	260	265
Glu Ile Cys Phe His Ala Glu Gly Cys Gly Leu Pro Pro Lys Ala Leu		270
	275	280
His Thr Ala Thr Phe Gln Ala Leu Gln Arg Asp Leu Glu Leu Gln Ala		285
	290	295
Ala Ser Ser Arg Glu Leu Ile Arg Lys Tyr Phe Cys Ser Arg Ile Gln		300
305	310	315
Gln Gln Ala Glu Thr Thr Ser Glu Glu Leu Gly Ala Val Thr Val Lys		320
	325	330
Ala Ser Tyr Arg Ala Ser Glu Gln Lys Leu Arg Val Glu Leu Leu Ser		335
	340	345
Ala Ser Ser Leu Leu Pro Leu Asp Ser Asn Gly Ser Ser Asp Pro Phe		350
	355	360
Val Gln Leu Thr Leu Glu Pro Arg His Glu Phe Pro Glu Leu Ala Ala		365
	370	375
Arg Glu Thr Gln Lys His Lys Lys Asp Leu His Pro Leu Phe Asp Glu		380
385	390	395
Thr Phe Glu Phe Leu Val Pro Ala Glu Pro Cys Arg Lys Ala Gly Ala		400
	405	410
Cys Leu Leu Leu Thr Val Leu Asp Tyr Asp Thr Leu Gly Ala Asp Asp		415
	420	425
Leu Glu Gly Glu Ala Phe Leu Pro Leu Arg Glu Val Pro Gly Leu Ser		430
	435	440
Gly Ser Glu Glu Pro Gly Glu Val Pro Gln Thr Arg Leu Pro Leu Thr		445
	450	455
Tyr Pro Ala Pro Asn Gly Asp Pro Ile Leu Gln Leu Leu Glu Gly Arg		460
465	470	475
Lys Gly Asp Arg Glu Ala Gln Val Phe Val Arg Leu Arg Arg His Arg		480
	485	490
Ala Lys Gln Ala Ser Gln His Ala Leu Arg Pro Ala Pro		495
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<210> 2919

<211> 455

<212> DNA

<213> Homo sapiens

<400> 2919

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300

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<210> 2920

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2920

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Glu	Lys	Glu	Glu	Gly	Gly	Ser	Thr	Glu	Ala	Val	His	Ser	Gly	Leu	Ala
			20					25					30		
Arg	Gln	Val	Ser	Ser	Leu	Leu	Thr	Asn	His	Leu	Ala	Arg	Ala	Thr	Glu
			35				40					45			
Cys	Cys	Gly	Asn	Gln	Ala	Ala	Gly	Asn	Asp	Ala	Leu	Gln	Asp	Val	Leu
	50					55				60					
Ser	Leu	Leu	Asn	Asp	Leu	Ser	Arg	Ser	His	Ile	Gly	Lys	Ala	Ile	Leu
65					70				75					80	
Ser	Gln	Pro	Ala	Cys	Val	Ser	Lys	Leu	Leu	Ser	Leu	Leu	Leu	Asp	Gln
			85					90						95	
Arg	Pro	Ser	Pro	Lys	Leu	Val	Leu	Ile	Ile	Leu	Gln	Leu	Cys	Arg	Ala
			100					105					110		
Ala	Leu	Pro	Leu	Met	Ser	Val	Glu	Asp	Cys	Gly	Asn	Val	Glu	Leu	Pro
		115					120					125			
Pro	Trp	Ser	Tyr	Ser	Val	Pro	Ser	Leu	Asn	Ser	Glu	Gln	Glu	Asp	
	130						135					140			

<210> 2921

<211> 1855

<212> DNA

<213> Homo sapiens

<400> 2921

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<210> 2922

<211> 452

<212> PRT

<213> Homo sapiens

<400> 2922

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Lys Ile Val Arg Ala Gln Gly Gln Tyr Met Tyr Asp Glu Gln Gly Ala			
35	40	45	
Glu Tyr Ile Asp Cys Ile Ser Asn Val Ala His Val Gly His Cys His			
50	55	60	
Pro Leu Val Val Gln Ala Ala His Glu Gln Asn Gln Val Leu Asn Thr			
65	70	75	80
Asn Ser Arg Tyr Leu His Asp Asn Ile Val Asp Tyr Ala Gln Arg Leu			
85	90	95	
Ser Glu Thr Leu Pro Glu Gln Leu Cys Val Phe Tyr Phe Leu Asn Ser			
100	105	110	
Gly Ser Glu Ala Asn Asp Leu Ala Leu Arg Leu Ala Arg His Tyr Thr			
115	120	125	
Gly His Gln Asp Val Val Val Leu Asp His Ala Tyr His Gly His Leu			
130	135	140	
Ser Ser Leu Ile Asp Ile Ser Pro Tyr Lys Phe Arg Asn Leu Asp Gly			
145	150	155	160
Gln Lys Glu Trp Val His Val Ala Pro Leu Pro Asp Thr Tyr Arg Gly			
165	170	175	
Pro Tyr Arg Xaa Arg Thr Thr Pro Thr Gln Leu Trp Xaa Tyr Ala Asn			
180	185	190	
Glu Val Lys Arg Val Val Ser Ser Ala Gln Glu Lys Gly Arg Lys Ile			
195	200	205	
Ala Ala Phe Phe Ala Glu Ser Leu Pro Ser Val Gly Gly Gln Ile Ile			
210	215	220	
Pro Pro Ala Gly Tyr Phe Ser Gln Val Ala Glu His Ile Arg Lys Ala			
225	230	235	240
Gly Gly Val Phe Val Ala Asp Glu Ile Gln Val Gly Phe Gly Arg Val			
245	250	255	
Gly Lys His Phe Trp Ala Phe Gln Leu Gln Gly Lys Asp Phe Val Pro			
260	265	270	
Asp Ile Val Thr Met Gly Lys Ser Ile Gly Asn Gly His Pro Val Ala			
275	280	285	
Cys Val Ala Ala Thr Gln Pro Val Ala Arg Ala Phe Glu Ala Thr Gly			
290	295	300	
Val Glu Tyr Phe Asn Thr Phe Gly Gly Ser Pro Val Ser Cys Ala Val			
305	310	315	320
Gly Leu Ala Val Leu Asn Val Leu Glu Lys Glu Gln Leu Gln Asp His			
325	330	335	
Ala Thr Ser Val Gly Ser Phe Leu Met Gln Leu Leu Trp Gln Gln Lys			
340	345	350	
Ile Arg His Pro Ile Val Gly Asp Val Arg Gly Val Gly Leu Phe Ile			
355	360	365	
Gly Val Asp Leu Ile Lys Asp Glu Ala Thr Arg Thr Pro Ala Thr Glu			
370	375	380	
Glu Ala Xaa Val Tyr Leu Val Ser Arg Leu Lys Glu Asn Tyr Val Leu			
385	390	395	400
Leu Ser Thr Asp Gly Pro Gly Arg Asn Ile Leu Lys Phe Lys Pro Pro			
405	410	415	
Met Cys Phe Ser Leu Asp Asn Ala Arg Gln Val Val Ala Lys Leu Asp			
420	425	430	
Ala Ile Leu Thr Asp Met Glu Glu Lys Val Arg Ser Cys Glu Thr Leu			

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440

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<210> 2923
<211> 572
<212> DNA
<213> Homo sapiens

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<210> 2924
<211> 91
<212> PRT
<213> Homo sapiens

<400> 2924
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20 25 30
Arg Arg Asn Ser Val Tyr Cys Gly Gly Glu Leu Gly Gly Ala Gln Pro
35 40 45
Arg Arg Thr Gly Ser Thr Ala Ala Pro Ala Ser Ala Pro Pro Ile Ala
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Gly Thr Gly Ser Pro Gly Trp Gln Arg Ser Leu Gln Pro Ala Leu Gly
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Pro Arg Thr Ala Ser Trp Gln Trp Trp Glu Gln
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<210> 2925
<211> 1999
<212> DNA
<213> Homo sapiens

<400> 2925

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720
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<210> 2926

<211> 305

<212> PRT

<213> Homo sapiens

<400> 2926

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			20					25					30		
Ser	Gln	Val	Glu	Ser	Glu	Ser	Ser	Val	Leu	Asn	Asp	Ser	Pro	Phe	Pro
			35				40					45			
Glu	Asp	Asp	Asn	Glu	Gly	Leu	His	Ser	Asp	Ser	Arg	Glu	Glu	Lys	Gln
			50			55					60				
Asn	Thr	Lys	Ser	Ala	Arg	Glu	Arg	Ala	Gly	Gln	Asp	Met	Gly	Leu	Glu
					70				75					80	
His	Gly	Phe	Glu	Lys	Pro	Leu	Asp	Ser	Ala	Met	Ser	Ala	Glu	Glu	Asp
				85					90					95	
Thr	Asp	Val	Arg	Gly	Arg	Arg	Lys	Lys	Lys	Thr	Pro	Arg	Lys	Ala	Glu
			100					105					110		
Asp	Thr	Arg	Glu	Asn	Arg	Lys	Leu	Glu	Asn	Lys	Asn	Ala	Phe	Leu	Glu
			115				120					125			
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			130				135				140				
Ala	Ala	Glu	Leu	Glu	Lys	Leu	Met	Pro	Val	Ser	Ala	Gln	Thr	Pro	Lys
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Gly	Arg	Arg	Leu	Ser	Gly	Glu	Glu	Arg	Gly	Leu	Trp	Ser	Thr	Asp	Ser
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			180					185					190		
Gln	Lys	Arg	His	Asp	Ser	Asp	Lys	Glu	Glu	Lys	Gly	Arg	Lys	Glu	Pro
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			210			215					220				
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<212> PRT

<213> Homo sapiens

<400> 2930

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Pro Gly Asp Ile Ile Lys Ser Thr Thr Val His Gly Ser Lys Pro Met
 65           70           75           80
Met Asp Leu Leu Ile Phe Leu Cys Ala Gln Tyr His Leu Asn Pro Ser
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Ser Tyr Thr Ile Asp Leu Leu Ser Ala Glu Gln Asn His Ile Lys Phe
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Lys Pro Lys Met Leu Asp Lys Lys Lys Pro Thr Pro Ile Ile Pro Glu
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Lys Thr Val Arg Val Val Ile Asn Phe Lys Lys Thr Gln Lys Thr Ile
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Val Arg Val Ser Pro His Ala Ser Leu Gln Glu Leu Ala Pro Ile Ile
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Cys Ser Lys Cys Glu Phe Asp Pro Leu His Thr Leu Leu Leu Lys Asp
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Tyr Gln Ser Gln Glu Pro Leu Asp Leu Thr Lys Ser Leu Asn Asp Leu
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Ala Pro Ala Thr Pro Leu Val Asn Lys His Arg Pro Thr Phe Thr Arg
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Ala Pro Lys Lys Arg Arg Ala Pro Leu Pro Pro Met Pro Ala Ser Gln
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Ile Val Lys Ser Met Ser Val Asp Glu Thr Asp Lys Ser Pro Cys Glu
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Gly Ile Ser Ser Asp Tyr	Ser Leu Glu Glu Ile Asp	Glu Lys Glu Glu
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Glu Ile Ile Val Tyr Pro	Glu Asn Thr Glu Asp Asn	Met Lys Asn Gly
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725	730	735
Ser Tyr Leu Lys Asn Tyr	Pro Leu Tyr Arg Gln Asp	Tyr Asn Pro Lys
740	745	750
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Lys	Leu	Cys	Lys	Glu	Arg	Ala	Gln	Lys	Leu	Cys	Arg	Asn	Ser	Thr	Arg
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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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Leu	Glu	Thr	Gln	Asn	Asn	Asn	Leu	Gln	Ala	Gln	Ile	Leu	Ala	Leu	Gln
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<212> PRT
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<400> 2936
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Phe	Val	Ser	Ser	Asp	Glu	Ser	Ser	Ser	Gly	Glu	Asn	Lys	Ser	Lys	Lys	
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<400> 2937

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<213> Homo sapiens

<400> 2938

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<211> 357

<212> PRT

<213> Homo sapiens

<400> 2940

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Phe	Val	Arg	Val	His	Val	Asp	Ala	Pro	Gly	Met	Glu	Glu	Gly	Ala	Pro
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Val	Phe	Pro	Leu	Gly	Tyr	Gln	Tyr	Pro	Ser	Leu	Asp	Gln	Leu	Ala	Asp
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Met	Ile	Pro	Cys	Val	Leu	Gln	Tyr	Leu	Asn	Phe	Ser	Thr	Ile	Ile	Gly
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Leu	Ser	Gly	Asn	Ser	Glu	Leu	Ile	Gln	Lys	Tyr	Arg	Asn	Ile	Ile	Thr
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Val	Val	Glu	Cys	Asn	Ser	Lys	Leu	Asp	Pro	Thr	Gln	Thr	Ser	Phe	Leu
			260					265					270		
Lys	Met	Ala	Asp	Ser	Gly	Gly	Gln	Pro	Gln	Leu	Thr	Gln	Pro	Gly	Lys

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Ser Ser Cys Met Thr Arg Leu Ser Arg Ser Arg Thr Ala Ser Leu Thr		
305	310	315
Ser Ala Ala Ser Val Asp Gly Asn Arg Ser Arg Ser Arg Thr Leu Ser		
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<212> DNA

<213> Homo sapiens

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<211> 229

<212> PRT

<213> Homo sapiens

<400> 2942

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 Gly Arg Gly His Asp His Leu Ala Gly Ala Ser Pro Thr Ala Arg Gln
 35 40 45
 His Leu Phe Lys Gln Gly Gln Leu Ser Ala Gln Gly Gly Ala Gln Pro
 50 55 60
 Ser Val Glu Ala Pro Ala Ala Pro Arg Pro Thr Ala Thr Gln Leu Thr
 65 70 75 80
 Arg Asp Leu Leu Arg Ser Arg Gly Ile Ala Gly Leu Tyr Lys Gly Leu
 85 90 95
 Gly Ala Thr Leu Leu Arg Asp Val Pro Phe Ser Val Val Tyr Phe Pro
 100 105 110
 Leu Phe Ala Asn Leu Asn Gln Leu Gly Arg Pro Ala Ser Glu Glu Lys
 115 120 125
 Ser Pro Phe Tyr Val Ser Phe Leu Ala Gly Cys Val Ala Gly Ser Ala
 130 135 140
 Ala Ala Val Ala Val Asn Pro Cys Asp Val Val Lys Thr Arg Leu Gln
 145 150 155 160
 Ser Leu Gln Arg Gly Val Asn Glu Asp Thr Tyr Ser Gly Ile Leu Asp
 165 170 175
 Cys Ala Arg Lys Ile Leu Arg His Glu Gly Pro Ser Ala Phe Leu Lys
 180 185 190
 Gly Ala Tyr Cys Arg Ala Leu Val Ile Ala Pro Leu Phe Gly Ile Ala
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<211> 1501

<212> DNA

<213> Homo sapiens

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<211> 218

<212> PRT

<213> Homo sapiens

<400> 2944

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		20						25					30		
Lys	Lys	Ile	Ser	Arg	Leu	Asp	Ala	Glu	Leu	Val	Lys	Tyr	Lys	Asp	Gln
		35					40					45			
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		50				55				60					
Ala	Leu	Arg	Val	Leu	Lys	Gln	Lys	Arg	Met	Tyr	Glu	Gln	Gln	Arg	Asp
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<210> 2946

<211> 463

<212> PRT

<213> Homo sapiens

<400> 2946

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Lys	Arg	Thr	Thr	Pro	Leu	Gln	Thr	His	Ser	Ile	Ile	Ile	Ser	Asp	Gln
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Ser	Glu	Ala	Thr	Gln	Val	Met	Ala	Glu	Pro	Gly	Glu	Gly	Gly	Ser	Glu
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Thr	Val	Ala	Leu	Pro	Pro	Pro	Pro	Pro	Ser	Glu	Glu	Gly	Gly	Val	Pro
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Gln	Asp	Ala	Ala	Gly	Arg	Gly	Gly	Thr	Pro	Gln	Ile	Arg	Val	Val	Gly
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Ala	Glu	Glu	Val	Lys	Thr	Gly
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Ala	Glu	Arg	Glu	Ser	Ala	Glu
		195		200		205
Lys	Glu	Val	Met	Glu	Gln	Met
		210		215		220
Gly	Glu	Glu	Ile	Glu	Val	Ala
225				230		235
Arg	Glu	Glu	Glu	Gly	Pro	Trp
				245		250
Pro	Leu	Glu	Ala	Ile	Gln	Leu
				260		265
Asp	Arg	Ala	Phe	Gln	Gln	Leu
				275		280
His	Tyr	Leu	Glu	Arg	Arg	Asn
				290		295
Trp	Met	Thr	Ala	Phe	Arg	Asn
305						310
Gly	Gln	Asp	Ala	Glu	Met	Leu
				325		330
Glu	Leu	Arg	His	Pro	Arg	Thr
				340		345
Arg	Asn	Pro	Tyr	Phe	Arg	Asn
				355		360
Arg	Ser	Ser	Gly	Arg	Val	Val
				370		375
Arg	Gly	His	Glu	Pro	Gln	Ser
385						390
Cys	Ser	Phe	Phe	Thr	Trp	Phe
				405		410
Lys	Ile	Ala	Glu	Ile	Ile	Lys
				420		425
Tyr	Tyr	Leu	Leu	Arg	Glu	Gly
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<211> 997

<212> DNA

<213> Homo sapiens

<400> 2947

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<211> 332

<212> PRT

<213> Homo sapiens

<400> 2948

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		20						25					30		
Ser	Asp	Ile	Arg	Ala	Gly	Thr	Ala	Pro	Ser	Cys	Arg	Asn	His	Ile	Lys
		35					40					45			
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His	Leu	Gly	Cys	His	Ser	Asp	Leu	Val	Thr	Asp	Leu	Asp	Phe	Ser	Pro
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Phe	Asp	Asp	Phe	Leu	Leu	Ala	Thr	Gly	Ser	Ala	Asp	Arg	Thr	Val	Lys
		100						105					110		
Leu	Trp	Arg	Leu	Pro	Gly	Pro	Gly	Gln	Ala	Leu	Pro	Ser	Ala	Pro	Gly
	115					120					125				
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	130					135					140				
Pro	Thr	Ser	Asp	Gly	Ile	Leu	Val	Ser	Ala	Ala	Gly	Thr	Thr	Val	Lys
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<210> 2950

<211> 279

<212> PRT

<213> Homo sapiens

<400> 2950

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			20					25					30		
Lys	Gly	Lys	Arg	Pro	Asn	Leu	Lys	Val	His	Ile	Asn	Thr	Thr	Ser	Asp
			35				40					45			
Ser	Ile	Leu	Leu	Lys	Phe	Leu	Arg	Pro	Ser	Pro	Asn	Val	Lys	Leu	Glu
			50			55					60				
Gly	Leu	Leu	Leu	Gly	Tyr	Gly	Ser	Asn	Val	Ser	Pro	Asn	Gln	Tyr	Phe
65					70					75				80	
Pro	Leu	Pro	Ala	Glu	Gly	Lys	Phe	Thr	Glu	Ala	Ile	Val	Asp	Ala	Glu
				85					90					95	
Pro	Lys	Tyr	Leu	Ile	Val	Val	Arg	Pro	Ala	Pro	Pro	Pro	Ser	Gln	Lys
			100					105					110		
Lys	Ser	Cys	Ser	Gly	Lys	Thr	Arg	Ser	Arg	Lys	Pro	Leu	Gln	Leu	Val
			115				120					125			
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			130				135					140			
Ile	Asn	Pro	His	His	Asp	Trp	Thr	Leu	Pro	Ser	His	Cys	Pro	Asn	Asp
145					150						155			160	
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				165						170				175	
Ile	Phe	Gln	Ile	Cys	Pro	Ala	Pro	Glu	Thr	Ile	Val	Glu	Asn	Leu	Lys
			180					185					190		
Pro	Asn	Thr	Val	Tyr	Glu	Phe	Gly	Val	Lys	Asp	Asn	Val	Glu	Gly	Gly
			195				200					205			
Ile	Trp	Ser	Lys	Ile	Phe	Asn	His	Lys	Thr	Val	Val	Gly	Ser	Lys	Lys
			210				215					220			
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225					230					235				240	
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<210> 2951

<211> 3478

<212> DNA

<213> Homo sapiens

<400> 2951

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<210> 2952

<211> 493

<212> PRT

<213> Homo sapiens

<400> 2952

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			20					25					30		
Gly	Ser	Pro	Arg	Glu	Phe	Ile	Tyr	Leu	Asn	Arg	Tyr	Lys	Arg	Ala	Gly
			35				40					45			
Glu	Ser	Gln	Asp	Lys	Cys	Thr	Tyr	Thr	Phe	Ile	Val	Pro	Gln	Gln	Arg
			50			55					60				
Val	Thr	Gly	Ala	Ile	Cys	Val	Asn	Ser	Lys	Glu	Pro	Glu	Val	Leu	Leu
65					70					75				80	
Glu	Asn	Arg	Val	His	Lys	Gln	Glu	Leu	Glu	Leu	Leu	Asn	Asn	Glu	Leu
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Leu	Lys	Gln	Lys	Arg	Gln	Ile	Glu	Thr	Leu	Gln	Gln	Leu	Val	Glu	Val
			100					105					110		
Asp	Gly	Gly	Ile	Val	Ser	Glu	Val	Lys	Leu	Leu	Arg	Lys	Glu	Ser	Arg
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Asn	Met	Asn	Ser	Arg	Val	Thr	Gln	Leu	Tyr	Met	Gln	Leu	Leu	His	Glu
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			165					170						175	
Lys	Asp	Leu	Glu	His	Lys	Phe	Gln	His	Leu	Ala	Met	Leu	Ala	His	Asn
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			210			215					220				
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			245						250					255	
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			260				265						270		
Gly	Pro	Trp	Arg	Asp	Cys	Leu	Gln	Ala	Leu	Glu	Asp	Gly	His	Asp	Thr
			275				280					285			
Ser	Ser	Ile	Tyr	Leu	Val	Lys	Pro	Glu	Asn	Thr	Asn	Arg	Leu	Met	Gln
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<211> 1377
<212> DNA
<213> Homo sapiens
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<211> 181

<212> PRT

<213> Homo sapiens

<400> 2954

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			20					25					30		
Leu	Ala	Ala	Gly	Ala	Val	Thr	Leu	Leu	Ser	Leu	Tyr	Leu	Leu	Phe	Gly
			35				40					45			
Tyr	Gly	Ala	Ser	Leu	Leu	Cys	Asn	Leu	Ile	Gly	Phe	Val	Tyr	Pro	Ala
	50					55					60				
Tyr	Ala	Ser	Ile	Lys	Ala	Ile	Glu	Ser	Pro	Ser	Lys	Asp	Asp	Asp	Thr
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Val	Trp	Leu	Thr	Tyr	Trp	Val	Val	Tyr	Ala	Leu	Phe	Gly	Leu	Ala	Glu
			85					90					95		
Phe	Phe	Ser	Asp	Leu	Leu	Leu	Ser	Trp	Phe	Pro	Phe	Tyr	Tyr	Val	Gly
			100					105					110		
Lys	Cys	Ala	Phe	Leu	Leu	Phe	Cys	Met	Ala	Pro	Arg	Pro	Trp	Asn	Gly
			115				120					125			
Ala	Leu	Met	Leu	Tyr	Gln	Arg	Val	Val	Arg	Pro	Leu	Phe	Leu	Arg	His
			130			135					140				
His	Gly	Ala	Val	Asp	Arg	Ile	Met	Asn	Asp	Leu	Ser	Gly	Arg	Ala	Leu
145					150					155				160	
Asp	Ala	Ala	Ala	Gly	Ile	Thr	Arg	Asn	Val	Lys	Pro	Ser	Gln	Thr	Pro
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<210> 2955
 <211> 295
 <212> DNA
 <213> Homo sapiens

<400> 2955
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 180
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<210> 2956
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 2956
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<210> 2960

<211> 868

<212> PRT

<213> Homo sapiens

<400> 2960

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		20					25					30			
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Leu	Arg	Arg	Ala	Ala	Val	Gly	Arg	Pro	Leu	Asp	Lys	His	Glu	Gly	Ala
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Leu	Glu	Thr	Leu	Leu	Arg	Tyr	Tyr	Asp	Gln	Ile	Cys	Ser	Ile	Glu	Pro
65			70					75						80	
Lys	Phe	Pro	Phe	Ser	Glu	Asn	Gln	Ile	Cys	Leu	Thr	Phe	Thr	Trp	Lys
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Asp	Ala	Phe	Asp	Lys	Gly	Ser	Leu	Phe	Gly	Gly	Ser	Val	Lys	Leu	Ala
			100				105						110		
Leu	Ala	Ser	Leu	Gly	Tyr	Glu	Lys	Ser	Cys	Val	Leu	Phe	Asn	Cys	Ala
		115				120					125				
Ala	Leu	Ala	Ser	Gln	Ile	Ala	Ala	Glu	Gln	Asn	Leu	Asp	Asn	Asp	Glu
	130				135						140				
Gly	Leu	Lys	Ile	Ala	Ala	Lys	His	Tyr	Gln	Phe	Ala	Ser	Gly	Ala	Phe
145				150					155					160	
Leu	His	Ile	Lys	Glu	Thr	Val	Leu	Ser	Ala	Leu	Ser	Arg	Glu	Pro	Thr

2195

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 625 630 635 640
 Gln Ser Asn Asn Glu Ala Asn Leu Arg Glu Glu Val Leu Lys Asn Leu
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 Ala Thr Ala Tyr Asp Asn Phe Val Glu Leu Val Ala Asn Leu Lys Glu
 660 665 670
 Gly Thr Lys Phe Tyr Asn Glu Leu Thr Glu Ile Leu Val Arg Phe Gln
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 785 790 795 800
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 820 825 830
 Tyr Pro Pro Val Tyr His Gln Ser Pro Gly Gln Ala Pro Tyr Pro Gly
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 Tyr Pro Gln Gln
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<210> 2961

<211> 434

<212> DNA

<213> Homo sapiens

<400> 2961

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 240
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 300
 aagtgtggg attacaggca tgagccaccg tgcctggcca gattttgttt ggctatgcc
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<210> 2962
 <211> 92
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Gln Gln Leu Gln Pro Gln Pro Val Ala Val Gln Gly Pro Glu Pro Ala
 50 55 60
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 65 70 75 80
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<210> 2963
 <211> 567
 <212> DNA
 <213> Homo sapiens

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<210> 2964
 <211> 115
 <212> PRT

<213> Homo sapiens

<400> 2964

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 Gly Trp Arg Gly Asp Thr Cys Gln Ser Gly Glu Ala Gly Ser Thr Leu
 35 40 45
 Gly Gly Pro Gly Arg Val Trp Gly Thr Ser Leu His Val Val Gly Leu
 50 55 60
 Leu Met Val His Glu Trp Val Val Val Lys Gly Ala Val Trp Ala Gly
 65 70 75 80
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 Pro Ala Gly
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<210> 2965

<211> 3739

<212> DNA

<213> Homo sapiens

<400> 2965

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2460

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 3739

<210> 2966

<211> 386

<212> PRT

<213> Homo sapiens

<400> 2966

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      50      55      60
Glu Val Leu Glu Trp Tyr Thr Ala Lys Asp Phe Ile Val Gly Lys Ser
      65      70      75      80
Leu Thr Ile Leu Gly Arg Thr Phe Phe Ile Tyr Asp Cys Asp Pro Phe
      85      90      95
Thr Arg Arg Tyr Tyr Lys Glu Lys Phe Gly Ile Thr Asp Leu Pro Arg
      100      105      110
Ile Asp Val Ser Lys Arg Glu Pro Pro Pro Val Lys Gln Glu Leu Pro
      115      120      125
Pro Tyr Asn Gly Phe Gly Leu Val Glu Asp Ser Ala Gln Asn Cys Phe
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Ala Leu Ile Pro Lys Ala Pro Lys Lys Asp Val Ile Lys Met Leu Val
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Pro Glu Asp Lys Asp Arg Arg Phe Val Phe Ser Tyr Phe Leu Ala Thr
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Asp Met Ile Ser Ile Phe Glu Pro Pro Val Arg Asn Ser Gly Ile Ile
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Gly Gly Lys Tyr Leu Gly Arg Thr Lys Val Val Lys Pro Tyr Ser Thr
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Val Asp Asn Pro Val Tyr Tyr Gly Pro Ser Asp Phe Phe Ile Gly Ala
      225      230      235      240
Val Ile Glu Val Phe Gly His Arg Phe Ile Ile Leu Asp Thr Asp Glu
      245      250      255
Tyr Val Leu Lys Tyr Met Glu Ser Asn Ala Ala Gln Tyr Ser Pro Glu
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Ala Leu Ala Ser Ile Gln Asn His Val Arg Lys Arg Glu Ala Pro Ala
      275      280      285
Pro Glu Ala Glu Ser Lys Gln Thr Glu Lys Asp Pro Gly Val Gln Glu
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Leu Glu Ala Leu Ile Asp Thr Ile Gln Lys Gln Leu Lys Asp His Ser
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Cys Lys Asp Asn Ile Arg Glu Ala Phe Gln Ile Tyr Asp Lys Glu Ala
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Ser Gly Tyr Val Asp Arg Asp Met Phe Phe Lys Ile Cys Glu Ser Leu
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Asn Val Pro Val Asp Asp Ser Leu Val Lys Glu Leu Leu Arg Met Cys
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<210> 2967

<211> 1103

<212> DNA

<213> Homo sapiens

<400> 2967

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<210> 2968

<211> 126

<212> PRT

<213> Homo sapiens

<400> 2968

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		20						25					30		
Trp	Glu	Asp	Lys	Asp	Glu	Phe	Leu	Asp	Val	Ile	Tyr	Trp	Phe	Arg	Gln
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Ile	Ile	Ala	Val	Val	Leu	Gly	Val	Ile	Trp	Gly	Val	Leu	Pro	Leu	Arg
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Gly	Phe	Leu	Gly	Ile	Ala	Gly	Phe	Cys	Leu	Ile	Asn	Ala	Gly	Val	Leu

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Tyr	Leu	Tyr	Phe	Ser	Asn	Tyr	Leu	Gln	Ile	Asp	Glu	Glu	Glu	Tyr	Gly
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Gly	Thr	Trp	Glu	Leu	Thr	Lys	Glu	Gly	Phe	Met	Thr	Ser	Phe	Ala	Xaa
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<210> 2969

<211> 667

<212> DNA

<213> Homo sapiens

<400> 2969

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<210> 2970

<211> 92

<212> PRT

<213> Homo sapiens

<400> 2970

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			20					25					30		
Ser	Gln	Thr	Ile	Met	Ile	Ala	Trp	Gly	Ser	Pro	Ser	Asn	Arg	Asp	Phe
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Met	Glu	Thr	Leu	Asn	Thr	Leu	Lys	Tyr	Ala	Asn	Arg	Ala	Arg	Asn	Ile
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<211> 632

<212> PRT

<213> Homo sapiens

<400> 2972

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Tyr Met Lys Glu Asn Leu Tyr Gln Leu Ile Lys Glu Arg Asn Lys Leu
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Pro Ser Pro Leu Leu Phe Pro Ser Leu His Asn Lys His Pro Gln Ser
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<212> DNA

<213> Homo sapiens

<400> 2973

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<212> PRT

<213> Homo sapiens

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<211> 1425

<212> DNA

<213> Homo sapiens

<400> 2975

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<211> 328

<212> PRT

<213> Homo sapiens

<400> 2976

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		20						25					30		
Thr	Leu	Arg	Trp	Glu	Glu	Thr	Arg	Thr	Pro	Glu	Ser	Gln	Pro	Asp	Thr
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Pro	Pro	Gly	Thr	Pro	Leu	Val	Ser	Gln	Asp	Glu	Lys	Arg	Asp	Ala	Glu
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Leu	Pro	Lys	Lys	Arg	Met	Gly	Lys	Ser	Asn	Pro	Gly	Trp	Glu	Asn	Leu
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<210> 2977
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<212> DNA
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<210> 2978

<211> 369

<212> PRT

<213> Homo sapiens

<400> 2978

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Asp	Pro	Asp	Gly	Ser	Trp	Ala	Gln	Ile	Ala	Glu	Lys	Arg	Ala	Val	Leu
			35				40					45			
Ala	His	Val	Asp	Val	Gln	Thr	Leu	Ser	Ser	Gln	Leu	Ala	Val	Thr	Val
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Gly	Pro	Gly	Glu	Arg	Arg	Ile	Gly	Pro	Gly	Glu	Pro	Leu	Glu	Leu	Leu
65				70						75				80	
Cys	Asn	Val	Ser	Gly	Ala	Leu	Pro	Pro	Ala	Gly	Arg	His	Ala	Ala	Tyr
				85					90					95	
Ser	Val	Gly	Trp	Glu	Met	Ala	Pro	Ala	Gly	Ala	Pro	Gly	Pro	Gly	Arg
			100					105					110		
Leu	Val	Ala	Gln	Leu	Asp	Thr	Glu	Gly	Val	Gly	Ser	Leu	Xaa	Ala	Leu

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145              150              155              160
Arg Cys Leu Ala Lys Ala Tyr Val Arg Gly Ser Gly Thr Arg Leu Arg
      165              170              175
Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val His Val Arg Glu
      180              185              190
Glu Gly Val Val Leu Glu Ala Val Ala Trp Leu Ala Gly Gly Thr Val
      195              200              205
Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile Ser Val Arg Gly
      210              215              220
Gly Pro Pro Gly Leu Arg Leu Ala Ala Ser Trp Trp Val Glu Arg Pro
225              230              235              240
Glu Asp Gly Glu Leu Ser Ser Val Pro Ala Gln Leu Val Gly Gly Val
      245              250              255
Gly Gln Asp Gly Val Ala Glu Leu Gly Val Arg Pro Gly Gly Gly Pro
      260              265              270
Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg Leu Arg Leu His
      275              280              285
Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys Ala Pro Ser Ala
      290              295              300
Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala Gly Ser Ala Arg
305              310              315              320
Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala Leu Asp Thr Leu
      325              330              335
Phe Val Pro Leu Leu Val Gly Thr Gly Val Ala Leu Val Thr Gly Ala
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<210> 2979

<211> 2191

<212> DNA

<213> Homo sapiens

<400> 2979

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<210> 2980

<211> 140

<212> PRT

<213> Homo sapiens

<400> 2980

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			20					25					30		
Gly	Thr	Glu	His	Gly	Gln	Pro	Phe	Ala	Arg	Gly	Trp	Gly	Ala	Trp	Gly
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Asn	Ala	Arg	Arg	Ala	Arg	Val	Gly	Arg	Ala	Glu	Cys	Leu	Leu	Ser	Gly
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Arg	Pro	Pro	Thr	Ala	Val	Leu	Pro	Arg	Leu	Val	Glu	Asn	Leu	Lys	Ala
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Arg	Val	Pro	Val	Pro	Gly	His	Thr	Glu	Pro	Leu	Trp	Ser	Glu	Gly	Thr
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Ala	Pro	Gly	Gln	Gly	Leu	Trp	Ser	His	Ala	Pro	Ala	Asp	Gly	Ser	Leu
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Met	Asn	Leu	Ile	Arg	Thr	Leu	Val	Gly	Ala	Val	Val	Phe	Glu	Leu	Leu
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<210> 2981

<211> 617

<212> DNA

<213> Homo sapiens

<400> 2981

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<210> 2982
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 2982
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 35 40 45
 Leu Pro Glu Gln Glu Ala Ala Glu Ala Asp Leu Ser Asn Met Glu Arg
 50 55 60
 Val Ser Leu Ser Thr Ala Asp Pro Gln Gly Val Thr Tyr Ala Glu Leu
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 Ser Thr Ser Ala Leu Ser Glu Ala Ala Ser Asp Thr Thr Gln Glu Pro
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 Pro Gly Ser His Glu Tyr Ala Ala Leu Lys Val
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<210> 2983
 <211> 614
 <212> DNA
 <213> Homo sapiens

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<212> PRT
<213> Homo sapiens

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35 40 45
Lys Arg Phe Ile Gly Asp Tyr Glu Pro Asn Thr Gly Lys Leu Tyr Ser
50 55 60
Arg Leu Val Tyr Val Glu Gly Asp Gln Leu Ser Leu Gln Ile Gln Asp
65 70 75 80
Thr Pro Gly Gly Val Gln Ile Gln Asp Ser Leu Pro Gln Val Val Asp
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Ser Leu Gln Met Arg Ala Val Ala Glu Gly Phe Leu Leu Val Tyr Ser
100 105 110
Ile Thr Asp Tyr Asp Ser Tyr Leu Ser Ile Arg Pro Leu Tyr Gln His
115 120 125
Ile Arg Lys Val His Pro Asp Ser Lys Ala Pro Val Ile Ile Val Gly
130 135 140
Asn Lys Gly Asp Leu Leu His Ala Arg Gln Val Gln Thr Gln Asp Gly
145 150 155 160
Ile Gln Leu Ala Asn Glu Leu Gly Ser Leu Phe Leu Glu Ile Ser Thr
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<210> 2985
<211> 4547
<212> DNA
<213> Homo sapiens

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<210> 2986

<211> 988

<212> PRT

<213> Homo sapiens

<400> 2986

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Glu	Leu	Cys	Val	Lys	Leu	Met	Phe	Leu	His	Pro	Val	Asp	Tyr	Gly	Arg
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Lys	Ala	Glu	Glu	Leu	Leu	Trp	Arg	Lys	Val	Tyr	Tyr	Glu	Val	Ile	Gln
	50					55					60				
Leu	Ile	Lys	Thr	Asn	Lys	Lys	His	Ile	His	Ser	Arg	Ser	Thr	Leu	Glu
65				70					75					80	
Cys	Ala	Tyr	Arg	Thr	His	Leu	Val	Ala	Gly	Ile	Gly	Phe	Tyr	Gln	His
			85					90						95	
Leu	Leu	Leu	Tyr	Ile	Gln	Ser	His	Tyr	Gln	Leu	Glu	Leu	Gln	Cys	Cys
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Ile	Asp	Trp	Thr	His	Val	Thr	Asp	Pro	Leu	Ile	Gly	Cys	Lys	Lys	Pro

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Ala Gly Val Asp Thr Glu Leu Leu Ala Glu Arg Phe Tyr Tyr Gln Ala		
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Leu Ser Val Ala Pro Gln Ile Gly Met Pro Phe Asn Gln Leu Gly Thr		
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Leu Ala Gly Ser Lys Tyr Tyr Asn Val Glu Ala Met Tyr Cys Tyr Leu		
195	200	205
Arg Cys Ile Gln Ser Glu Val Ser Phe Glu Gly Ala Tyr Gly Asn Leu		
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225	230	235
Cys Glu Thr Arg Lys Leu Ser Pro Gly Lys Lys Arg Cys Lys Asp Ile		
245	250	255
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260	265	270
Lys Ser Ser Ser Val Asp Ser Glu Leu Thr Ser Leu Cys Gln Ser Val		
275	280	285
Leu Glu Asp Phe Asn Leu Cys Leu Phe Tyr Leu Pro Ser Ser Pro Asn		
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355	360	365
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Phe Gln Ser Asp Gly Thr Asp Glu Pro Glu Ser Lys Glu Pro Val Glu		
385	390	395
Lys Glu Glu Glu Pro Asp Pro Glu Pro Pro Val Thr Pro Gln Val		
405	410	415
Gly Glu Gly Arg Lys Ser Arg Lys Phe Ser Arg Leu Ser Cys Leu Arg		
420	425	430
Arg Arg Arg His Pro Pro Lys Val Gly Asp Asp Ser Asp Leu Ser Glu		
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Gly Phe Glu Ser Asp Ser Ser His Asp Ser Ala Arg Ala Ser Glu Gly		
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Ser Asp Ser Gly Ser Asp Lys Ser Leu Glu Gly Gly Gly Thr Ala Phe		
465	470	475
Asp Ala Glu Thr Asp Ser Glu Met Asn Ser Gln Glu Ser Arg Ser Asp		
485	490	495
Leu Glu Asp Met Glu Glu Glu Glu Gly Thr Arg Ser Pro Thr Leu Glu		
500	505	510
Pro Pro Arg Gly Arg Ser Glu Ala Pro Asp Ser Leu Asn Gly Pro Leu		
515	520	525
Gly Pro Ser Glu Ala Ser Ile Ala Ser Asn Leu Gln Ala Met Ser Thr		
530	535	540
Gln Met Phe Gln Thr Lys Arg Cys Phe Arg Leu Ala Pro Thr Phe Ser		

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Arg	Asn	Glu	Arg	Ser	Ile	Gln	Glu	Lys	Leu	Gln	Val	Leu	Met	Ala	Glu
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Pro	Asp	Leu	Ile	Ile	Val	Cys	Ala	Gln	Ser	Ser	Gln	Ser	Leu	Trp	Asn
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Arg	Leu	Ser	Val	Leu	Leu	Asn	Leu	Leu	Pro	Ala	Ala	Gly	Glu	Leu	Gln
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Glu	Ser	Gly	Leu	Ala	Leu	Cys	Pro	Glu	Val	Gln	Asp	Leu	Leu	Glu	Gly
		675						680						685	
Cys	Glu	Leu	Pro	Asp	Leu	Pro	Ser	Ser	Leu	Leu	Leu	Pro	Glu	Asp	Met
	690					695						700			
Ala	Leu	Arg	Asn	Leu	Pro	Pro	Leu	Arg	Ala	Ala	His	Arg	Arg	Phe	Asn
705					710						715				720
Phe	Asp	Thr	Asp	Arg	Pro	Leu	Leu	Ser	Thr	Leu	Glu	Glu	Ser	Val	Val
				725					730						735
Arg	Ile	Cys	Cys	Ile	Arg	Ser	Phe	Gly	His	Phe	Ile	Ala	Arg	Leu	Gln
			740					745							750
Gly	Ser	Ile	Leu	Gln	Phe	Asn	Pro	Glu	Val	Gly	Ile	Phe	Val	Ser	Ile
		755						760							765
Ala	Gln	Ser	Glu	Gln	Glu	Ser	Leu	Leu	Gln	Gln	Ala	Gln	Ala	Gln	Phe
	770					775									780
Arg	Met	Ala	Gln	Glu	Glu	Ala	Arg	Arg	Asn	Arg	Leu	Met	Arg	Asp	Met
785					790					795					800
Ala	Gln	Leu	Arg	Leu	Gln	Leu	Glu	Val	Ser	Gln	Leu	Glu	Gly	Ser	Leu
				805						810					815
Gln	Gln	Pro	Lys	Ala	Gln	Ser	Ala	Met	Ser	Pro	Tyr	Leu	Val	Pro	Asp
			820					825							830
Thr	Gln	Ala	Leu	Cys	His	His	Leu	Pro	Val	Ile	Arg	Gln	Leu	Ala	Thr
		835						840							845
Ser	Gly	Arg	Phe	Ile	Val	Ile	Ile	Pro	Arg	Thr	Val	Ile	Asp	Gly	Leu
	850						855								860
Asp	Leu	Leu	Lys	Lys	Glu	His	Pro	Gly	Ala	Arg	Asp	Gly	Ile	Arg	Tyr
865					870					875					880
Leu	Glu	Ala	Glu	Phe	Lys	Lys	Gly	Asn	Arg	Tyr	Ile	Arg	Cys	Gln	Lys
				885						890					895
Glu	Val	Gly	Lys	Ser	Phe	Glu	Arg	His	Lys	Leu	Lys	Arg	Gln	Asp	Ala
			900						905						910
Asp	Ala	Trp	Thr	Leu	Tyr	Lys	Ile	Leu	Asp	Ser	Cys	Lys	Gln	Leu	Thr
		915						920							925
Leu	Ala	Gln	Gly	Ala	Gly	Glu	Glu	Asp	Pro	Ser	Gly	Met	Val	Thr	Ile
		930						935							940
Ile	Thr	Gly	Leu	Pro	Leu	Asp	Asn	Pro	Ser	Val	Leu	Ser	Gly	Pro	Met
945					950						955				960
Gln	Ala	Ala	Leu	Gln	Ala	Ala	Ala	His	Ala	Ser	Val	Asp	Ile	Lys	Asn
				965							970				975
Val	Leu	Asp	Phe	Tyr	Lys	Gln	Trp	Lys	Glu	Ile	Gly				

980

985

<210> 2987
 <211> 1016
 <212> DNA
 <213> Homo sapiens

<400> 2987
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 120
 gaaaggcggg cctgaaattc acaggggaga gcggatattc caggaggcag tctaagttat
 180
 ctgaggcgtg caactcacc agtgagacca agttactgta gttctccagc atcacgtccc
 240
 agtacaggtc cctctgagcg tcatccaggt cctgccactc ctcccagggt aagtgcacag
 300
 ctacctctc aaaggacacc aactcctgta atgataccag gctgtttag gtctccagca
 360
 tcacgttcct gtacagggtc ctctaagcat catccacgtc ctgccactct tcccagggtga
 420
 agtgcacagc cacatcttca aaggacacca accccagaga tttattcctt tctttagct
 480
 gggccggcctt ggggcttggg tctatgtccc tgcgggtcgg tgcgaggcg aagaggaacc
 540
 cgtgggcccc ggggatcccc gggggccgga ccagtgttcc ccagttgtgg gagcagacgc
 600
 gtgggcgcat cacgggcggg cagggtgaa gtgcagctat gttccagtg tcctctgggt
 660
 gtttccaaga gcaacaggaa acgaataaat ctctgatgga gtctcactct gtcaccagg
 720
 ctggagtga gtggcacgat ctccgtcac tgcaagctcc acctcccagg ttcacaccat
 780
 cctcctgcct cagcctcccc agttgcagg actacaggca cccgccacaa tgcccggcta
 840
 ttttttgtgt ttttagtaga gatggggttt cactatgtta gccaggatgg tcttgatctc
 900
 ctgacctcat tactcgcnng actccggctc ccaaagtgt ggaattacna gcgtgagaca
 960
 ccgqgcctgg tctccatcaa atgacttttt aaataaaata cggttctcac ctaaca
 1016

<210> 2988
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 2988
 Trp Ser Leu Thr Leu Ser Pro Arg Leu Glu Cys Ser Gly Thr Ile Ser
 1 5 10 15
 Ala His Cys Lys Leu His Leu Pro Gly Ser His His Pro Pro Ala Ser
 20 25 30
 Ala Ser Arg Val Ala Gly Thr Thr Gly Thr Arg His Asn Ala Arg Leu

2225

<210> 2990
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 2990
 Met Phe Pro Val Phe Ser Gly Cys Phe Gln Glu Leu Gln Glu Lys Asn
 1 5 10 15
 Lys Ser Leu Glu Leu Val Ser Phe Glu Glu Val Ala Val His Phe Thr
 20 25 30
 Trp Glu Glu Trp Gln Asp Leu Asp Asp Ala Gln Arg Thr Leu Tyr Arg
 35 40 45
 Asp Val Met Leu Glu Thr Tyr Ser Ser Leu Val Ser Leu Gly His Cys
 50 55 60
 Ile Thr Lys Pro Glu Met Ile Phe Lys Leu Glu Gln Gly Ala Glu Pro
 65 70 75 80
 Trp Ile Val Glu Glu Thr Leu Asn Leu Arg Leu Ser Gly Gly Ser Lys
 85 90 95
 Lys Gln Val Phe Ser Gly Ile Cys His Arg Ser Leu Val Glu Leu Gln
 100 105 110
 Glu Val

<210> 2991
 <211> 980
 <212> DNA
 <213> Homo sapiens

<400> 2991
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 120
 ttggtgggct ccagctgacc cctccagagc ccctgagtgg tggcggctctg cagtcctcag
 180
 tcagcagcag cagacgtcac ccgtcatata gggccattca ctgaagtgtc acctggtgag
 240
 cttggttggc cagtcctctg ctcgggactg ctgctgggag gcctgggagc cgcgcacttc
 300
 gcctctgcag tctcgggaca ctctctgagc tctttacaag cagcatcttg agaggtagac
 360
 agtttccctt cctcactttt gaagaccgca gtctctgtct tggcatctac agtgaggctg
 420
 agcggttccct tcatgccgcc attcatcact gtctcagtta ccttgctctgt actttctgca
 480
 tcctcctctc cgtcagagct ggettcctat gccacactgc ctgccgttc tggctgcact
 540
 gccagggcag ccgcactggg agtcagaggg tccatggggt cagtgtctgt ttccatttcc
 600
 actggagaat tactccttaa agaattcttt gtgctttctc aggggaagagt gaactctgaa
 660
 aaagaagccc agcccgctctc tttagttggc atcggtcctc ctgtgtctca gacatcagat
 720

cccacagaat ccaatggagc accgtggggt gtttccattg ggacatcaaa gtttagctgac
 780
 cagttgggtg gttcactcag gtccacctcc attttatacct ccgtgttggc actgctgggt
 840
 tcaaacaagt cttgctttgc tccatcttct tcttcagagt ctgtactttc ctcaactgtct
 900
 gtactccccg agctggatcg tctttgggat tctgggtgtga atgcgatgtg cttttctctc
 960
 catatatctt cctcatcaga
 980

<210> 2992

<211> 64

<212> PRT

<213> Homo sapiens

<400> 2992

Val	Val	Ala	Val	Cys	Ser	Pro	Gln	Ser	Ala	Ala	Ala	Asp	Val	Thr	Arg
1				5				10					15		
His	Thr	Gly	Pro	Phe	Thr	Glu	Val	Ser	Pro	Gly	Ala	Leu	Gly	Trp	Pro
			20					25				30			
Val	Leu	Cys	Ser	Gly	Leu	Leu	Leu	Gly	Gly	Leu	Gly	Ala	Ala	His	Phe
		35				40				45					
Ala	Ser	Ala	Val	Ser	Gly	His	Ser	Ser	Ala	Ser	Leu	Gln	Ala	Ala	Ser
	50					55					60				

<210> 2993

<211> 687

<212> DNA

<213> Homo sapiens

<400> 2993

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 120
 cgatacctca agtttgacat cgagattgga cgtggctcct tcaagacggt gtatcgaggg
 180
 ctagacaccg acaccacagt ggaggtggcc tgggtgtgagc tgcagactcg gaaactgtct
 240
 agagctgagc ggcagcgctt ctacagaggag gtggagatgc tcaaggggct gcagcaccct
 300
 aacatcgctc gtttctatga ttcgtggaag tcggtgctga ggggccagggt ttgcatcggt
 360
 ctggtcaccg aactcatgac ctcgggcacg ctcaagacgt acctgaggcg gttccgggag
 420
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 480
 cactccccgg ttcctcccat cctgcaccgg gatctcaagt gcgacaatgt ctttatcacg
 540
 ggacctactg gctctgtcaa aatcggggac ctgggcctgg ccacgctcaa gcgcgcctcc
 600
 tttgccaaga gtgtcatcgg gacccccgaa ttcattggccc ccgagatgta cgaggaaaag
 660

tacgatgagg ccgtggacgt gtacgcg
687

<210> 2994

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2994

Xaa Cys Pro Arg Ser Arg Glu Pro Leu Met Val Thr Glu Ala Val Ala
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Leu Glu Arg Arg Arg Glu Gln Glu Lys Glu Asp Met Glu Thr Gln
20 25 30
Ala Val Ala Thr Ser Pro Asp Gly Arg Tyr Leu Lys Phe Asp Ile Glu
35 40 45
Ile Gly Arg Gly Ser Phe Lys Thr Val Tyr Arg Gly Leu Asp Thr Asp
50 55 60
Thr Thr Val Glu Val Ala Trp Cys Glu Leu Gln Thr Arg Lys Leu Ser
65 70 75 80
Arg Ala Glu Arg Gln Arg Phe Ser Glu Glu Val Glu Met Leu Lys Gly
85 90 95
Leu Gln His Pro Asn Ile Val Arg Phe Tyr Asp Ser Trp Lys Ser Val
100 105 110
Leu Arg Gly Gln Val Cys Ile Val Leu Val Thr Glu Leu Met Thr Ser
115 120 125
Gly Thr Leu Lys Thr Tyr Leu Arg Arg Phe Arg Glu Met Lys Pro Arg
130 135 140
Val Leu Gln Arg Trp Ser Arg Gln Ile Leu Arg Gly Leu His Phe Leu
145 150 155 160
His Ser Arg Val Pro Pro Ile Leu His Arg Asp Leu Lys Cys Asp Asn
165 170 175
Val Phe Ile Thr Gly Pro Thr Gly Ser Val Lys Ile Gly Asp Leu Gly
180 185 190
Leu Ala Thr Leu Lys Arg Ala Ser Phe Ala Lys Ser Val Ile Gly Thr
195 200 205
Pro Glu Phe Met Ala Pro Glu Met Tyr Glu Glu Lys Tyr Asp Glu Ala
210 215 220
Val Asp Val Tyr Ala
225

<210> 2995

<211> 1879

<212> DNA

<213> Homo sapiens

<400> 2995

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taataaaaatt aagcagtcaa aagaagtagc aaaaacaaga tagtcattca tatatacaga
120
acatatagat tcatttctag ttgattcaat cctatttatg tatttaaaat acaaaaataat
180
ggccatctgg ctagttccaa cggtagagca tgagactctt aaaatacaaa atacatctta
240

atgtgtcaag aagaccacag ttagcaccag gaaaggaact ttacttttagc ttctgattac
300
ttttttattt ttattttttac tttattatta ttattattat ttttgagatg gagtctcact
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420
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480
ccaccacacc cgggtgattt ttgtattttt agtagagacg gggtttcgcc atgttgctca
540
ggctgggtctc gaactcccga cctcaagtga cttgctcacc ttggcctccc aaagtgcctg
600
gattacaggt gtgagccact gcaccacagc tggcagtcaa ttttaagcct cctatttccc
660
aggtttttagc ttaataatcc tcattagttt ttcagatttt tgtcagtctt gttttggggc
720
tattttgcct tagtgggcct aaacagaata ttaaaataca ttaataatcc atactgagag
780
tagagtataa atgggtttct cactccttag ggacacgagt ggaaacaata catcccatga
840
acacaggtga atgtccctgg ttatccctga gctgggcagt ttcacacaat cattttttct
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960
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1020
ccacgaaaac tcccccaagg atgaagcctt ctccttcag gtttccagag aagcctccgt
1080
tccaggctcg gaagaagttg taccacactc ccagacggat aaatcccata aacatcatct
1140
tccgcctttg tggaccatag aactttttct tttcatccag gaagatttct cctttgaaat
1200
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1320
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1440
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1560
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1620
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1680
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1740
ggagctatgg gaaaaaatg gagctgtgat tatggccgtg cggaggccag gctgtttcct
1800
ctgtcgagag gaagctgcgg atctgtcctc cctgaaaagc atgttggacc agctgggcgt
1860

ccccctctat gcagtggtg
1879

<210> 2996

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2996

His	Gln	Glu	Arg	Asn	Phe	Thr	Leu	Ala	Ser	Asp	Tyr	Phe	Phe	Ile	Phe
1				5					10					15	
Ile	Phe	Thr	Leu	Leu	Leu	Leu	Leu	Leu	Phe	Leu	Arg	Trp	Ser	Leu	Thr
			20					25					30		
Leu	Xaa	Thr	Gln	Ala	Gly	Ile	Gln	Trp	Cys	Asp	Leu	Ser	Ser	Leu	Gln
			35				40					45			
Pro	Pro	Pro	Pro	Arg	Phe	Lys	Arg	Phe	Ser	Cys	Leu	Ser	Leu	Leu	Ser
			50			55					60				
Ser	Trp	Asp	Ser	Asp	Arg	Cys	Leu	Pro	Pro	His	Pro	Gly	Asp	Phe	Cys
65					70					75				80	
Ile	Phe	Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys	Cys	Ser	Gly	Trp	Ser	Arg
				85					90					95	
Thr	Pro	Asp	Leu	Lys											
				100											

<210> 2997

<211> 800

<212> DNA

<213> Homo sapiens

<400> 2997

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120
acaaccatac ctgcttcttc tgagataaca agaattgaga tggagtcaac atccaccctg
180
acccccacac caaggagac cagcacctcc caggagatcc actcagccac aaagccaagc
240
actgttcctt acaaggcact cactagtgcc acgattgagg actccatgac acaagtcag
300
tcctctagca gaggacctag ccctgatcag tccacaatgt cacaagacat atccactgaa
360
gtgatcacca ggctctctac ctccccatc aagacagaat ctacagaaat gaccattacc
420
acccaaacag ggtctcctgg ggctacatca aggggtaccc ttaccttgga cacttcaaca
480
acttttatgt cagggaccca ctcaactgca tctcaaagat tttcacactc acagatgacc
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600
cccgccctcg cctctttctc actggcttca cctgtcttga cctcattttt ttcgtttttt
660
gccattccc aaaaacctcc accttttttg gttcctgggc aaacttttcc cctagggctg
720

gggaaaccca aaatgtgggg ccaaccaga actgaaacat tcccccaat ggacaacctt
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<210> 2998
 <211> 266
 <212> PRT
 <213> Homo sapiens

<400> 2998
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 20 25 30
 Ser Thr Ile Lys Asp Ile Val Ser Thr Thr Ile Pro Ala Ser Ser Glu
 35 40 45
 Ile Thr Arg Ile Glu Met Glu Ser Thr Ser Thr Leu Thr Pro Thr Pro
 50 55 60
 Arg Glu Thr Ser Thr Ser Gln Glu Ile His Ser Ala Thr Lys Pro Ser
 65 70 75 80
 Thr Val Pro Tyr Lys Ala Leu Thr Ser Ala Thr Ile Glu Asp Ser Met
 85 90 95
 Thr Gln Val Met Ser Ser Ser Arg Gly Pro Ser Pro Asp Gln Ser Thr
 100 105 110
 Met Ser Gln Asp Ile Ser Thr Glu Val Ile Thr Arg Leu Ser Thr Ser
 115 120 125
 Pro Ile Lys Thr Glu Ser Thr Glu Met Thr Ile Thr Thr Gln Thr Gly
 130 135 140
 Ser Pro Gly Ala Thr Ser Arg Gly Thr Leu Thr Leu Asp Thr Ser Thr
 145 150 155 160
 Thr Phe Met Ser Gly Thr His Ser Thr Ala Ser Gln Arg Phe Ser His
 165 170 175
 Ser Gln Met Thr Ala Leu Met Ser Arg Thr Pro Gly Asp Val Pro Trp
 180 185 190
 Leu Thr His Pro Ser Gly Glu Glu Pro Ala Ser Ala Ser Phe Ser Leu
 195 200 205
 Ala Ser Pro Val Leu Thr Ser Phe Phe Ser Phe Phe Ala His Ser Gln
 210 215 220
 Lys Pro Pro Pro Phe Leu Val Pro Gly Gln Thr Phe Ser Leu Gly Leu
 225 230 235 240
 Gly Lys Pro Lys Met Trp Gly Gln Pro Arg Thr Glu Thr Phe Pro Pro
 245 250 255
 Met Asp Asn Leu Phe Glu Lys Gly Pro Phe
 260 265

<210> 2999
 <211> 550
 <212> DNA
 <213> Homo sapiens

<400> 2999
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 120
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 180
 ctgggtacca tgaacagcag caggaggcag acaggctcct ggggtggaaag aagctgggtcc
 240
 acagtgaaga cccacctcca agccagggaa agcctgaagc ctgggggatg ggtcgccagt
 300
 cccagaaacc gcaagggcaa cttgtggtgc ttttccttg gcccacccat ggccgccc
 360
 ggacgaattg gcatgcactt tctccctct gagggccata aaagcccctg ggctcagcca
 420
 gagctgagcg gatatcagga cgacaagctg cacagaggta ctaccatac caaggcctcc
 480
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<210> 3000

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3000

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Val	Gln	Leu	Val	Val	Leu	Ile	Ser	Ala	Gln	Leu	Trp	Leu	Ser	Pro	Gly
			20					25					30		
Ala	Phe	Met	Gly	Leu	Arg	Gly	Glu	Lys	Val	His	Ala	Asn	Ser	Ser	Met
		35					40					45			
Gly	Gly	His	Gly	Trp	Ala	Gln	Gly	Lys	Ala	Pro	Gln	Val	Ala	Leu	Ala
	50					55				60					
Val	Ser	Gly	Thr	Gly	Asp	Pro	Ser	Pro	Arg	Leu	Gln	Ala	Phe	Pro	Gly
65					70				75					80	
Leu	Glu	Val	Gly	Leu	His	Cys	Gly	Pro	Ala	Ser	Phe	His	Pro	Gly	Ala
			85					90					95		
Cys	Leu	Pro	Pro	Ala	Ala	Val	His	Gly	Asp	Gln	Ala	Val	His	Val	Lys
		100						105					110		
Gly	Cys	Leu	Gln	Ala	Ser	Thr	Gly	Leu	Ser	Ser	Val	His	Pro	Ser	Ala
		115					120					125			
Ser	Phe	Pro	Cys	Leu	Ser	Val	Pro	Lys	Ala	Trp	Arg	Gly	Pro	Lys	Trp
	130					135				140					
Gln	Gly	Gly	Trp	His	Val	Ser	Thr	Thr	Pro	Ser	Met	Cys	Thr	Leu	Ser
145					150				155					160	
Trp	Ala	Val	Thr	Ala	Pro	Gly									
					165										

<210> 3001

<211> 1092

<212> DNA

<213> Homo sapiens

<400> 3001

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 120
 gaagtacaga ggttgagccc ctatgtatgc ctgggggagt cccagaaagt ggaatcccaa
 180
 ccttgctcag ctcaccagtg tttcttctat aaccagaca ttgcaaagac agcagtaccc
 240
 actgaggcat ccagcccagc tcaggccctg ccaccnca gtaccaaagc atcattgtca
 300
 ggcaaggat acagaacaca gtgctctcac cagactgcag cttgggggac acccagcacg
 360
 gagagaagct gaggcggaac tgcactatct accggccctg gttctcccc tacagctact
 420
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 480
 atgagggcaa gtgggacaac tgcctttctg aggacatggc tgagaacatc tgttcgtcct
 540
 cttctcccc agagaacact tgccctcgag aagccaccaa gaaatccagg catggcctgg
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 actccatcac atcccaggac atcctaattg cttccagggt gcaccagca cagcagaatg
 660
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 720
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 780
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 840
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 960
 cctgtgtcc tttccagaac ccggtctca tcaccttggt ctaatggtt cctagcaaca
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 1092

<210> 3002

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3002

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1			5						10					15	
Trp	Leu	Ser	Leu	Lys	Gly	His	Cys	Ser	Val	Ser	Ala	Leu	Arg	Cys	Leu
			20					25					30		
Glu	Val	Gln	Arg	Leu	Ser	Pro	Tyr	Val	Cys	Leu	Gly	Glu	Ser	Gln	Lys
		35					40				45				
Val	Glu	Ser	Gln	Pro	Cys	Ser	Ala	His	Gln	Cys	Phe	Phe	Tyr	Asn	Pro
	50				55				60						
Asp	Ile	Ala	Lys	Thr	Ala	Val	Pro	Thr	Glu	Ala	Ser	Ser	Pro	Ala	Gln

```

65          70          75          80
Ala Leu Pro Pro Xaa Ser Thr Lys Ala Ser Leu Ser Gly Lys Gly Tyr
          85          90          95
Arg Thr Gln Cys Ser His Gln Thr Ala Ala Trp Gly Thr Pro Ser Thr
          100          105          110
Glu Arg Ser
          115

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<210> 3003

<211> 474

<212> DNA

<213> Homo sapiens

<400> 3003

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120
ccaacaggag gaccggaaga gactggcgga gctgctggtc tccgtcctgg aacagggctt
180
gccaccctcc caccgtgtca tctggctgca gagtgtccga atcctgtccc gggaccgcaa
240
ctgcctggac ccgttcacca gccgccagag cctgcaggca ctagcctgct atgctgacat
300
ctctgtctct gaggggtccg tcccagagtc cgcagacatg gatgttgtac tggagtcctt
360
caagtgcctg tgcaacctcg tgctcagcag ccctgtggca cagatgctgg cagcagaggg
420
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474

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<210> 3004

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3004

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Met Glu Pro Arg Ala Val Ala Glu Ala Val Glu Thr Gly Glu Glu Asp
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Val Ile Met Glu Ala Leu Arg Ser Tyr Asn Gln Glu His Ser Gln Ser
20          25          30
Phe Thr Phe Asp Asp Ala Gln Gln Glu Asp Arg Lys Arg Leu Ala Glu
35          40          45
Leu Leu Val Ser Val Leu Glu Gln Gly Leu Pro Pro Ser His Arg Val
50          55          60
Ile Trp Leu Gln Ser Val Arg Ile Leu Ser Arg Asp Arg Asn Cys Leu
65          70          75          80
Asp Pro Phe Thr Ser Arg Gln Ser Leu Gln Ala Leu Ala Cys Tyr Ala
85          90          95
Asp Ile Ser Val Ser Glu Gly Ser Val Pro Glu Ser Ala Asp Met Asp
100          105          110
Val Val Leu Glu Ser Leu Lys Cys Leu Cys Asn Leu Val Leu Ser Ser
115          120          125
Pro Val Ala Gln Met Leu Ala Ala Glu Ala Arg Leu Val Val Lys Leu

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130 135 140
 Thr Glu Arg Val Gly Leu Tyr Arg Glu Arg Ser
 145 150 155

<210> 3005
 <211> 799
 <212> DNA
 <213> Homo sapiens

<400> 3005
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 120
 ccaggcctcg tgaagattgt ccgcaacagc cggcgggaag gactgatccg cgcgcggctg
 180
 cagggtgga aggcggccac cgccccagtc gtcggcttct ttgatgcca cgtcgagttc
 240
 aacacgggct gggccgagcc cgcactgtcg cggatccgag aggaccggcg tcgcatcgtag
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 ctgccagcca tcgacaacat caagtacagc acgtttgagg tgcagcagta tgcgaacgcc
 360
 gcccatggct acaactgggg cctctggtgc atgtacatca tccccccgca ggactggctg
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 gaccgcgcg acgagtcagc acccatcagg accccagcca tgatcggtcg ctcttcgta
 480
 gtggaccgag agtacttcgg agacattggg ctgctggacc ccggcatgga ggtgtatggc
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 ggcgagaacg tagaactggg catgaggggtg tggcagtgtg gcggcagcat ggaggtgctg
 600
 ccctgctccc gcgtggccca catcgagcgc accaggaagc cctacaacaa cgacattgac
 660
 tactacgcca agcgcaacgc cctgcgccacc gccgaggtgt ggatggatga cttcaagtcc
 720
 cacgtgtaca tggcctggaa catccccatg tcgaaccagc ggggtggactt cggggacgtg
 780
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 799

<210> 3006
 <211> 266
 <212> PRT
 <213> Homo sapiens

<400> 3006
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 1 5 10 15
 Ile Leu Val Asp Asp Asn Ser Asp Asn Val Glu Leu Lys Phe Asn Leu
 20 25 30
 Asp Gln Tyr Val Asn Lys Arg Tyr Pro Gly Leu Val Lys Ile Val Arg
 35 40 45
 Asn Ser Arg Arg Glu Gly Leu Ile Arg Ala Arg Leu Gln Gly Trp Lys
 50 55 60
 Ala Ala Thr Ala Pro Val Val Gly Phe Phe Asp Ala His Val Glu Phe

```

65          70          75          80
Asn Thr Gly Trp Ala Glu Pro Ala Leu Ser Arg Ile Arg Glu Asp Arg
          85          90          95
Arg Arg Ile Val Leu Pro Ala Ile Asp Asn Ile Lys Tyr Ser Thr Phe
          100          105          110
Glu Val Gln Gln Tyr Ala Asn Ala Ala His Gly Tyr Asn Trp Gly Leu
          115          120          125
Trp Cys Met Tyr Ile Ile Pro Pro Gln Asp Trp Leu Asp Arg Gly Asp
          130          135          140
Glu Ser Ala Pro Ile Arg Thr Pro Ala Met Ile Gly Cys Ser Phe Val
          145          150          155          160
Val Asp Arg Glu Tyr Phe Gly Asp Ile Gly Leu Leu Asp Pro Gly Met
          165          170          175
Glu Val Tyr Gly Gly Glu Asn Val Glu Leu Gly Met Arg Val Trp Gln
          180          185          190
Cys Gly Gly Ser Met Glu Val Leu Pro Cys Ser Arg Val Ala His Ile
          195          200          205
Glu Arg Thr Arg Lys Pro Tyr Asn Asn Asp Ile Asp Tyr Tyr Ala Lys
          210          215          220
Arg Asn Ala Leu Arg Thr Ala Glu Val Trp Met Asp Asp Phe Lys Ser
          225          230          235          240
His Val Tyr Met Ala Trp Asn Ile Pro Met Ser Asn Pro Gly Val Asp
          245          250          255
Phe Gly Asp Val Ser Glu Arg Leu Ala Leu
          260          265

```

<210> 3007

<211> 536

<212> DNA

<213> Homo sapiens

<400> 3007

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120
actcagetta ttgacctggg agcagacatt agtttgcgga gtcgctggac aaacatgaat
180
gctttgcatt atgctgctta ttttgatgtc cctgaactta taagagtgat tttgaaaaca
240
tcgaaaccaa aagatgtgga tgccccttgc agtgatttta attttggaac agctttgcat
300
attgcagcat acaacttgtg tgcaggtgct gtgaagtgcc tcttggagca gggagcaaat
360
cctgcattta ggaatgacaa aggacagatc cctgctgatg ttgttccaga cccagtagat
420
atgccgttag agatggctga cgccgcagcc actgctaagg aaatcaagca gatgcttcta
480
gatgcgggtg ctctgtcatg taacatctca aaggccatgc tcccccttc acgcgt
536

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<210> 3008

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3008

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Met Thr Leu Leu His Tyr Thr Cys Lys Ser Gly Ala His Gly Ile Gly
 1              5              10              15
Asp Val Glu Thr Ala Val Lys Phe Ala Thr Gln Leu Ile Asp Leu Gly
      20              25              30
Ala Asp Ile Ser Leu Arg Ser Arg Trp Thr Asn Met Asn Ala Leu His
      35              40              45
Tyr Ala Ala Tyr Phe Asp Val Pro Glu Leu Ile Arg Val Ile Leu Lys
      50              55              60
Thr Ser Lys Pro Lys Asp Val Asp Ala Pro Cys Ser Asp Phe Asn Phe
65              70              75              80
Gly Thr Ala Leu His Ile Ala Ala Tyr Asn Leu Cys Ala Gly Ala Val
      85              90              95
Lys Cys Leu Leu Glu Gln Gly Ala Asn Pro Ala Phe Arg Asn Asp Lys
      100             105             110
Gly Gln Ile Pro Ala Asp Val Val Pro Asp Pro Val Asp Met Pro Leu
      115             120             125
Glu Met Ala Asp Ala Ala Ala Thr Ala Lys Glu Ile Lys Gln Met Leu
      130             135             140
Leu Asp Ala Val Pro Leu Ser Cys Asn Ile Ser Lys Ala Met Leu Pro
145             150             155             160
Pro Ser Arg

```

<210> 3009

<211> 1335

<212> DNA

<213> Homo sapiens

<400> 3009

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120
catggcagta gtctcctcgt tctccgccgc cgctagccta gctgagtcgc cggcttctgc
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240
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300
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360
tgtggagttc cttcttaaaa gaagaaaaaa gtgattatgt agactatgga tcggagcaaa
420
cggaattcaa ttgcaggatt tcctccacgt gtggagcgtc ttgaagagtt tgaaggaggt
480
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540
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600
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660

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cttaatgata acacattgag cagtaaccgg gcaaacaatgc tgaaagaagt acagctcatg
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 960
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 1020
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<210> 3010

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3010

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Glu	Arg	Leu	Glu	Glu	Phe	Glu	Gly	Gly	Gly	Gly	Gly	Glu	Gly	Asn	Val
		20						25					30		
Ser	Gln	Val	Gly	Arg	Val	Trp	Pro	Ser	Ser	Tyr	Arg	Ala	Leu	Ile	Ser
	35						40					45			
Ala	Phe	Ser	Arg	Leu	Thr	Arg	Leu	Asp	Asp	Phe	Thr	Cys	Lys	Lys	Ile
	50					55					60				
Gly	Ser	Gly	Phe	Phe	Ser	Glu	Val	Phe	Lys	Val	Arg	His	Arg	Ala	Ser
65					70					75				80	
Gly	Gln	Val	Met	Ala	Leu	Lys	Met	Asn	Thr	Leu	Ser	Ser	Asn	Arg	Ala
			85					90					95		
Asn	Met	Leu	Lys	Glu	Val	Gln	Leu	Met	Asn	Arg	Leu	Ser	His	Pro	Asn
		100						105					110		
Ile	Leu	Arg	Phe	Met	Gly	Val	Cys	Val	His	Gln	Gly	Gln	Leu	His	Ala
	115					120						125			
Leu	Thr	Glu	Tyr	Ile	Asn	Ser	Gly	Asn	Leu	Glu	Gln	Leu	Leu	Asp	Ser
	130					135					140				
Asn	Leu	His	Leu	Pro	Trp	Thr	Val	Arg	Val	Lys	Leu	Ala	Tyr	Asp	Ile
145					150					155				160	
Ala	Val	Gly	Leu	Ser	Tyr	Leu	His	Phe	Lys	Gly	Ile	Phe	His	Arg	Asp
			165					170					175		
Leu	Thr	Ser	Lys	Asn	Cys	Leu	Ile	Lys	Arg	Asp	Glu	Asn	Gly	Tyr	Ser

	180		185		190
Ala Val Val	Ala Asp Phe Gly	Leu Ala Glu Lys Ile	Pro Asp Val Ser		
	195	200	205		
Met Gly Ser	Glu Lys Leu Ala Val Val	Gly Ser Pro Phe Trp Met Ala			
	210	215	220		
Pro Glu Val	Leu Arg Asp Glu Pro Tyr Asn Glu Lys Ala Asp Val Phe				
225	230	235	240		
Ser Tyr Gly	Ile Ile Leu Cys Glu Ile Ile Val Arg Ile Gln Ala Asp				
	245	250	255		
Pro Asp Tyr	Leu Pro Arg Thr Glu Asn Phe Gly Leu Asp Tyr Asp Ala				
	260	265	270		
Phe Gln His	Met Val Gly Asp Cys Pro Pro Asp Phe Leu Gln Leu Thr				
	275	280	285		
Phe Asn Cys	Cys Asn Val Ser Val Phe Leu Pro Leu Pro Phe Ile Arg				
	290	295	300		
Gly Trp Leu	Asn Pro Phe				
305	310				

<210> 3011

<211> 3253

<212> DNA

<213> Homo sapiens

<400> 3011

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240
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300
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420
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720
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780
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840
cacctgctgg ccccggggcc acaggacatc tatgatgtgc ccccggttcg ggggctgctt
900

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<210> 3012

<211> 870

<212> PRT

<213> Homo sapiens

<400> 3012

Met	Asn	His	Leu	Asn	Val	Leu	Ala	Lys	Ala	Leu	Tyr	Asp	Asn	Val	Ala
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Glu	Ser	Pro	Asp	Glu	Leu	Ser	Phe	Arg	Lys	Gly	Asp	Ile	Met	Thr	Val
			20					25					30		
Leu	Glu	Gln	Asp	Thr	Gln	Gly	Leu	Asp	Gly	Trp	Trp	Leu	Cys	Ser	Leu
		35				40						45			
His	Gly	Arg	Gln	Gly	Ile	Val	Pro	Gly	Asn	Arg	Leu	Lys	Ile	Leu	Val
	50				55					60					
Gly	Met	Tyr	Asp	Lys	Lys	Pro	Ala	Gly	Pro	Gly	Ser	Gly	Pro	Pro	Ala
65					70					75				80	
Thr	Pro	Ala	Gln	Pro	Gln	Pro	Gly	Leu	His	Ala	Pro	Ala	Pro	Pro	Ala
			85				90							95	
Ser	Gln	Tyr	Thr	Pro	Met	Leu	Pro	Asn	Thr	Tyr	Gln	Pro	Gln	Pro	Asp
			100					105					110		
Ser	Val	Tyr	Leu	Val	Pro	Thr	Pro	Ser	Lys	Ala	Gln	Gln	Gly	Leu	Tyr
		115				120						125			
Gln	Val	Pro	Gly	Pro	Ser	Pro	Gln	Phe	Gln	Ser	Pro	Pro	Ala	Lys	Gln
	130					135					140				
Thr	Ser	Thr	Phe	Ser	Lys	Gln	Thr	Pro	His	His	Pro	Phe	Pro	Ser	Pro
145					150					155				160	
Ala	Thr	Asp	Leu	Tyr	Gln	Val	Pro	Pro	Gly	Pro	Gly	Gly	Pro	Ala	Gln

										165					170					175				
Asp	Ile	Tyr	Gln	Val	Pro	Pro	Ser	Ala	Gly	Met	Gly	His	Asp	Ile	Tyr									
				180				185					190											
Gln	Val	Pro	Pro	Ser	Met	Asp	Thr	Arg	Ser	Trp	Glu	Gly	Thr	Lys	Pro									
				195			200						205											
Pro	Ala	Lys	Val	Val	Val	Pro	Thr	Arg	Val	Gly	Gln	Gly	Tyr	Val	Tyr									
				210		215						220												
Glu	Ala	Ala	Gln	Pro	Glu	Gln	Asp	Glu	Tyr	Asp	Ile	Pro	Arg	His	Leu									
225					230				235						240									
Leu	Ala	Pro	Gly	Pro	Gln	Asp	Ile	Tyr	Asp	Val	Pro	Pro	Val	Arg	Gly									
				245				250						255										
Leu	Leu	Pro	Ser	Gln	Tyr	Gly	Gln	Glu	Val	Tyr	Asp	Thr	Pro	Pro	Met									
				260				265					270											
Ala	Val	Lys	Gly	Pro	Asn	Gly	Arg	Asp	Pro	Leu	Leu	Glu	Val	Tyr	Asp									
				275			280						285											
Val	Pro	Pro	Ser	Val	Glu	Lys	Gly	Leu	Pro	Pro	Ser	Asn	His	His	Ala									
				290			295						300											
Val	Tyr	Asp	Val	Pro	Pro	Ser	Val	Ser	Lys	Asp	Val	Pro	Asp	Gly	Pro									
305					310					315					320									
Leu	Leu	Arg	Glu	Glu	Thr	Tyr	Asp	Val	Pro	Pro	Ala	Phe	Ala	Lys	Ala									
				325				330						335										
Lys	Pro	Phe	Asp	Pro	Ala	Arg	Thr	Pro	Leu	Val	Leu	Gly	Ala	Pro	Pro									
				340				345					350											
Pro	Asp	Ser	Pro	Pro	Ala	Glu	Asp	Val	Tyr	Tyr	Val	Pro	Pro	Pro	Ala									
				355			360						365											
Pro	Asp	Leu	Tyr	Asp	Val	Pro	Pro	Gly	Leu	Arg	Arg	Pro	Gly	Pro	Gly									
				370			375					380												
Thr	Leu	Tyr	Asp	Val	Pro	Arg	Glu	Arg	Val	Leu	Pro	Pro	Glu	Val	Ala									
385					390					395					400									
Asp	Gly	Gly	Val	Val	Asp	Ser	Gly	Val	Tyr	Ala	Val	Pro	Pro	Pro	Ala									
				405				410						415										
Glu	Arg	Glu	Ala	Pro	Ala	Glu	Gly	Lys	Arg	Leu	Ser	Ala	Ser	Ser	Thr									
				420				425					430											
Gly	Ser	Thr	Arg	Ser	Ser	Gln	Ser	Ala	Ser	Ser	Leu	Glu	Val	Ala	Gly									
				435			440						445											
Pro	Gly	Arg	Glu	Pro	Leu	Glu	Leu	Glu	Val	Ala	Val	Glu	Ala	Leu	Ala									
				450			455					460												
Arg	Leu	Gln	Gln	Gly	Val	Ser	Ala	Thr	Val	Ala	His	Leu	Leu	Asp	Leu									
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Ala	Gly	Ser	Ala	Gly	Ala	Thr	Gly	Gly	Trp	Arg	Ser	Pro	Ser	Glu	Pro									

595 600 605
 Lys Ala Thr Ala Pro Gly Pro Glu Gly Gly Gly Thr Leu His Pro Asn
 610 615 620
 Pro Thr Asp Lys Thr Ser Ser Ile Gln Ser Arg Pro Leu Pro Ser Pro
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 Pro Lys Phe Thr Ser Gln Asp Ser Pro Asp Gly Gln Tyr Glu Asn Ser
 645 650 655
 Glu Gly Gly Trp Met Glu Asp Tyr Asp Tyr Val His Leu Gln Gly Lys
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 675 680 685
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 690 695 700
 Glu Arg Leu Glu Gln Glu Val Ser Arg Pro Ile Asp His Asp Leu Ala
 705 710 715 720
 Asn Trp Thr Pro Ala Gln Pro Leu Ala Pro Gly Arg Thr Gly Gly Leu
 725 730 735
 Gly Pro Ser Asp Arg Gln Leu Leu Leu Phe Tyr Leu Glu Gln Cys Glu
 740 745 750
 Ala Asn Leu Thr Thr Leu Thr Asn Ala Val Asp Ala Phe Phe Thr Ala
 755 760 765
 Val Ala Thr Asn Gln Pro Pro Lys Ile Phe Val Ala His Ser Lys Phe
 770 775 780
 Val Ile Leu Ser Ala His Lys Leu Val Phe Ile Gly Asp Thr Leu Ser
 785 790 795 800
 Arg Gln Ala Lys Ala Ala Asp Val Arg Ser Gln Val Thr His Tyr Ser
 805 810 815
 Asn Leu Leu Cys Asp Leu Leu Arg Gly Ile Val Ala Thr Thr Lys Ala
 820 825 830
 Ala Ala Leu Gln Tyr Pro Ser Pro Ser Ala Ala Gln Asp Met Val Glu
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<210> 3013

<211> 248

<212> DNA

<213> Homo sapiens

<400> 3013

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248

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 Leu Ala Ser Gly Leu Asp Val Ile Asp Gln Val Leu Glu Glu Gln Thr
 35 40 45
 Lys Ala Ala Gln Gln Ala Gly Trp Gly Leu Leu Ala Arg Arg Trp
 50 55 60
 Val Ala Pro Pro Arg Pro Thr Val Ile Leu Leu Arg Leu Glu Gly Ala
 65 70 75 80
 Ile Asp

<210> 3015
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<210> 3016
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 3016
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 35 40 45
 Val Pro Gly Gly Met Val His Pro Ile Phe Leu Glu Pro Val Thr Val

50 55 60
 Gln Leu Gly Gln Val Lys Phe Ser Cys Glu Asn Ala Ser Pro Asp Thr
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 Arg Cys Val Gly Gln Leu Ser Ile Pro Ser Pro Arg Met Pro Trp Gly
 85 90 95
 Arg Leu Gln Ala Arg Tyr Val
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<210> 3017

<211> 4796

<212> DNA

<213> Homo sapiens

<400> 3017

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<210> 3018

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3018

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Thr	Thr	Pro	Thr	Pro	Thr	Leu	Ala	Cys	Pro	Ser	Pro	Gln	Cys	Ala	Phe
		20						25					30		
Gln	Arg	Trp	Ile	Thr	Ile	Gln	His	Arg	Trp	Ser	Ser	Ala	Leu	His	Cys
	35					40						45			
Gln	Gly	Leu	Thr	Pro	Thr	Pro	Gly	Ala	Leu	Pro	Asn	Tyr	Leu	Lys	Val
	50					55					60				
Lys	Ala	Asn	Arg	Ala	Ile	Pro	Gln	Ala	Val	Thr	Ser	Thr	Arg	Leu	Gly
65					70					75				80	
Thr	Thr	Lys	Pro	Pro	Cys	Thr	Ile	Thr	Pro	Pro	Cys	Arg	Ala	Val	Arg
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Ser	Thr	Ser	Pro	Arg	Leu	Pro	Thr								
					100										

<210> 3019

<211> 882

<212> DNA

<213> Homo sapiens

<400> 3019

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 360
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 420

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 882

<210> 3020

<211> 58

<212> PRT

<213> Homo sapiens

<400> 3020

Gln	Gly	Thr	His	Glu	Leu	Pro	Gly	Trp	Pro	Gly	Pro	Cys	Cys	Gly	Thr
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Gly	Pro	Ala	Pro	Val	Leu	Leu	Ser	Ala	Arg	Pro	Gln	Gly	Pro	Ala	Arg
		20					25				30				
Asp	Pro	Ala	Arg	Pro	Arg	Phe	Leu	Ala	Cys	His	His	Arg	Gln	Thr	Cys
		35				40					45				
Gln	Pro	Leu	Pro	Ala	Gly	Leu	Pro	Gly	Arg						
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<210> 3021

<211> 1008

<212> DNA

<213> Homo sapiens

<400> 3021

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<210> 3022

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3022

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Gly	Leu	Phe	Leu	Ser	Ser	Arg	Leu	Glu	Cys	Ser	Gly	Ala	Ile	Met	Asp
			20					25					30		
His	Cys	Ser	Leu	Asp	Leu	Pro	Gly	Ser	Ser	Asp	Pro	Pro	Gly	Ser	Pro
		35					40					45			
Pro	Val	Ala	Gly	Thr	Thr	Gly	Ala	Leu	Pro	His	Arg	Lys	Ala	His	Phe
	50					55					60				
Leu	Glu	Ala	Glu	Thr	Glu	Ala	Pro	Ser	Gly	Lys	Gly	Asp	Pro	Pro	Gly
65					70					75				80	
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<210> 3023

<211> 1834

<212> DNA

<213> Homo sapiens

<400> 3023

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 180
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420
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<210> 3024

<211> 347

<212> PRT

<213> Homo sapiens

<400> 3024

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 35          40          45
Met Leu Arg Ser His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp
 50          55          60
Met Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys Ala
 65          70          75          80
Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr Gln
 85          90          95
Asp Ala Arg Leu Val His Ala Asp Leu Ser Glu Phe Asn Met Leu Tyr
 100         105         110
His Gly Gly Gly Val Tyr Ile Ile Asp Val Ser Gln Ser Val Glu His
 115         120         125
Asp His Pro His Ala Leu Glu Phe Leu Arg Lys Asp Cys Ala Asn Val
 130         135         140
Asn Asp Phe Phe Met Arg His Ser Val Ala Val Met Thr Val Arg Glu
 145         150         155         160
Leu Phe Glu Phe Val Thr Asp Pro Ser Ile Thr His Glu Asn Met Asp
 165         170         175
Ala Tyr Leu Ser Lys Ala Met Glu Ile Ala Ser Gln Arg Thr Lys Glu
 180         185         190
Glu Arg Ser Ser Gln Asp His Val Asp Glu Glu Val Phe Lys Arg Ala
 195         200         205
Tyr Ile Pro Arg Thr Leu Asn Glu Val Lys Asn Tyr Glu Arg Asp Met
 210         215         220
Asp Ile Ile Met Lys Leu Lys Glu Glu Asp Met Ala Met Asn Ala Gln
 225         230         235         240
Gln Asp Asn Ile Leu Pro Asp Cys Tyr Arg Ile Glu Glu Arg Phe Val
 245         250         255
Arg Ser Ser Glu Gly Pro Cys Thr Leu Glu Asn Gln Val Glu Glu Arg
 260         265         270
Thr Cys Ser Asp Ser Glu Asp Ile Gly Ser Ser Glu Cys Ser Asp Thr
 275         280         285
Asp Ser Glu Glu Gln Gly Asp His Ala Arg Pro Lys Lys His Thr Thr
 290         295         300
Asp Pro Asp Ile Asp Lys Lys Glu Arg Lys Lys Met Val Lys Glu Ala
 305         310         315         320
Gln Arg Glu Lys Arg Lys Asn Lys Ile Pro Lys His Val Lys Lys Arg
 325         330         335
Lys Glu Lys Thr Ala Lys Thr Lys Lys Gly Lys
 340         345

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<210> 3025

<211> 1370

<212> DNA

<213> Homo sapiens

<400> 3025

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120
agctttctgaa gcatctaggt gatcttctta aatctttgac aggaaagagt aggaaacttt
180
ttggcagact tttacctggt gaatggactt gttttagaat caaggaaaag aagagaacat
240
ctcagtgaag aggatattct tcgaaataag gccatcatgg agagtttgag taaaggtgga
300
aacataatgg aacagaatth tgagccgatt cgaagacagt ctcttacacc tcctcctcag
360
aacactatta catgggaaga atatatatct gctgaaaatg gaaaagctcc tcatctgggt
420
agagaattgg tgtgcaaaga gagtaagaaa acgttttaaag ctacgatagc catgagccag
480
gaattttccct tagggataga gttattattg aatgttttag aagtagtagc tcccttcaag
540
cactttaaca agcttagaga atttgttcag atgaagcttc ctccaggctt tcctgtaaaa
600
ttagatatac ctgtgtttcc cacaatcaca gccactgtga cttttcagga gtttcgatac
660
gatgaatttg atggctccat ctttactata cctgatgact acaaggaaga cccaagccgt
720
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780
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840
acacattgaa tcgacacatc agtaatacga tacagtgaag tgggcctcta ataagaatth
900
cagcgagttt tctgatgtgc cattttttgt ctttttaaaa atatacatat tataaatgta
960
atagtttgac acattaatga ccctaagacc tgcgtatgtg aagcagctat gagtgtgtg
1020
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1080
tatctatata tatatctaaa acactcctgg accattaacg taaattaaat gtcttaagag
1140
atatggagcc cttttaaact tgatcatctt atgcaagggt acatttataa atattccttc
1200
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1260
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1370

<210> 3026

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3026

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 20 25 30
 Trp Glu Glu Tyr Ile Ser Ala Glu Asn Gly Lys Ala Pro His Leu Gly
 35 40 45
 Arg Glu Leu Val Cys Lys Glu Ser Lys Lys Thr Phe Lys Ala Thr Ile
 50 55 60
 Ala Met Ser Gln Glu Phe Pro Leu Gly Ile Glu Leu Leu Leu Asn Val
 65 70 75 80
 Leu Glu Val Val Ala Pro Phe Lys His Phe Asn Lys Leu Arg Glu Phe
 85 90 95
 Val Gln Met Lys Leu Pro Pro Gly Phe Pro Val Lys Leu Asp Ile Pro
 100 105 110
 Val Phe Pro Thr Ile Thr Ala Thr Val Thr Phe Gln Glu Phe Arg Tyr
 115 120 125
 Asp Glu Phe Asp Gly Ser Ile Phe Thr Ile Pro Asp Asp Tyr Lys Glu
 130 135 140
 Asp Pro Ser Arg Phe Pro Asp Leu
 145 150

<210> 3027

<211> 1154

<212> DNA

<213> Homo sapiens

<400> 3027

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 120
 cgcagacggc ggcctccgcg gcgctctcca gtcattggact accggcggct tctcatgagc
 180
 cgggtggtcc cggggcaatt cgacgacgcg gactcctctg acagtgaaaa cagagacttg
 240
 aagacagtca aagagaagga tgacattctg tttgaagacc ttcaagacaa tgtgaatgag
 300
 aatggtgaag gtgaaataga agatgaggag gaggagggtt atgatgatga tgatgatgac
 360
 tgggactggg atgaaggagt tggaaaactc gccaaagggt atgtctggaa tggaggaagc
 420
 aacccacagg caaatcgaca gacctccgac agcagttcag ccaaaatgtc tactccagca
 480
 gacaaggtct tacggaaatt tgagaataaa attaatttag ataagctaaa tgttactgat
 540
 tccgtcataa ataaagtcac cgaaaagtct agacaaaagg aagcagatat gtatcgcatc
 600
 aaagataagg cagacagagc aactgtagaa cagggtgttg atcccagaac aagaatgatt
 660
 ttattcaaga tgttgactag aggaatcata acagagataa atggctgcat tagcacagga
 720
 aaagaagcta atgtatacca tgctagcaca gcaaatggag agagcagagc aatcaaaatt
 780

tataaaactt ctattttggt gttcaaagat cgggataaat atgtaagtgg agaattcaga
 840
 tttcgtcatg gctattgtaa aggaaaccct aggaaaatgg tgaaaacttg ggcagaaaaa
 900
 gaaatgagga acttaatcag gctaaacaca gcagagatac catgtccaga accaataatg
 960
 ctaagaagtc atgtttcttgt catgagtttc atcggtaaag atgacatttc ttttcattca
 1020
 aggctgcac cactcttgaa aaatgtccag ttatcagaat ccaaggctcg ggagttgtac
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 1140
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 1154

<210> 3028

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3028

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Asp	Asp	Ala	Asp	Ser	Ser	Asp	Ser	Glu	Asn	Arg	Asp	Leu	Lys	Thr	Val
		20						25				30			
Lys	Glu	Lys	Asp	Asp	Ile	Leu	Phe	Glu	Asp	Leu	Gln	Asp	Asn	Val	Asn
	35					40					45				
Glu	Asn	Gly	Glu	Gly	Glu	Ile	Glu	Asp	Glu	Glu	Glu	Glu	Gly	Tyr	Asp
50					55					60					
Asp	Asp	Asp	Asp	Asp	Trp	Asp	Trp	Asp	Glu	Gly	Val	Gly	Lys	Leu	Ala
65				70					75					80	
Lys	Gly	Tyr	Val	Trp	Asn	Gly	Gly	Ser	Asn	Pro	Gln	Ala	Asn	Arg	Gln
			85					90					95		
Thr	Ser	Asp	Ser	Ser	Ser	Ala	Lys	Met	Ser	Thr	Pro	Ala	Asp	Lys	Val
		100						105					110		
Leu	Arg	Lys	Phe	Glu	Asn	Lys	Ile	Asn	Leu	Asp	Lys	Leu	Asn	Val	Thr
	115					120					125				
Asp	Ser	Val	Ile	Asn	Lys	Val	Thr	Glu	Lys	Ser	Arg	Gln	Lys	Glu	Ala
130					135					140					
Asp	Met	Tyr	Arg	Ile	Lys	Asp	Lys	Ala	Asp	Arg	Ala	Thr	Val	Glu	Gln
145				150					155					160	
Val	Leu	Asp	Pro	Arg	Thr	Arg	Met	Ile	Leu	Phe	Lys	Met	Leu	Thr	Arg
			165					170					175		
Gly	Ile	Ile	Thr	Glu	Ile	Asn	Gly	Cys	Ile	Ser	Thr	Gly	Lys	Glu	Ala
	180					185						190			
Asn	Val	Tyr	His	Ala	Ser	Thr	Ala	Asn	Gly	Glu	Ser	Arg	Ala	Ile	Lys
	195					200					205				
Ile	Tyr	Lys	Thr	Ser	Ile	Leu	Val	Phe	Lys	Asp	Arg	Asp	Lys	Tyr	Val
210					215					220					
Ser	Gly	Glu	Phe	Arg	Phe	Arg	His	Gly	Tyr	Cys	Lys	Gly	Asn	Pro	Arg
225				230					235					240	
Lys	Met	Val	Lys	Thr	Trp	Ala	Glu	Lys	Glu	Met	Arg	Asn	Leu	Ile	Arg
			245					250					255		
Leu	Asn	Thr	Ala	Glu	Ile	Pro	Cys	Pro	Glu	Pro	Ile	Met	Leu	Arg	Ser

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                260                265                270
His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp Ile Ser Phe His
      275                280                285
Ser Arg Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys
      290                295                300
Ala Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr
305                310                315                320
Gln Asp Ala Arg Leu Val His Ala Asp Arg Arg
      325                330

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<210> 3029
 <211> 344
 <212> DNA
 <213> Homo sapiens

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<400> 3029
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120
acatttcccg aggaactaga tatgagtact tttattgatg ttgaagatga aaaatctcct
180
cagactgaaa gttgcactga caggggagca gaaaatgaag gtagttgtca cagtgatcag
240
atgagcaacg atttctccaa tgatgatggg gttgatgaag gaatctgttt tgaaaccaat
300
agtggaactg aaaagatctc aaaatctgga cctgaaaaga attc
344

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<210> 3030
 <211> 114
 <212> PRT
 <213> Homo sapiens

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<400> 3030
Thr Arg Asp Ala Arg Lys Gly Leu Arg Phe Leu His Phe Pro Tyr Leu
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Leu Thr Leu Gln Leu Lys Arg Phe Asp Phe Asp Tyr Thr Thr Met His
      20      25      30
Arg Ile Lys Leu Asn Asp Arg Met Thr Phe Pro Glu Glu Leu Asp Met
      35      40      45
Ser Thr Phe Ile Asp Val Glu Asp Glu Lys Ser Pro Gln Thr Glu Ser
      50      55      60
Cys Thr Asp Arg Gly Ala Glu Asn Glu Gly Ser Cys His Ser Asp Gln
      65      70      75      80
Met Ser Asn Asp Phe Ser Asn Asp Asp Gly Val Asp Glu Gly Ile Cys
      85      90      95
Phe Glu Thr Asn Ser Gly Thr Glu Lys Ile Ser Lys Ser Gly Pro Glu
      100     105     110
Lys Asn

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<210> 3031
 <211> 567

<212> DNA

<213> Homo sapiens

<400> 3031

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 120
 gttggtcctg atgttattcc cctgccacac atctacggag ctgcaatcaa aggtgtggaa
 180
 gtgttctgtc ctctggatcc cccgccgcca tatgaagctg tggtgagcca gatggaccag
 240
 gagcagggat cttcattcca aatgtcagaa ggatcagaag ctgctgtgat cccattggat
 300
 ctgggctgca cacaagtgc tcaagatggg gacattccta acatacctgc cgaagaaaat
 360
 gcatccacct caactccag ttcaaccctg gtgcgtccta tcagaagccg gagagccctc
 420
 ccacccttga ggaccagtc gaagagtgc cctgtgctcc atccttctga ggagagagct
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 567

<210> 3032

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3032

Ala Glu Glu Ala Glu Asp His Gly Arg Ile Pro Asp Pro Asp Asp Phe
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 Val Pro Pro Val Pro Pro Pro Ser Tyr Phe Ala Thr Phe Tyr Ser Cys
 20 25 30
 Thr Pro Arg Met Asn Arg Arg Leu Val Gly Pro Asp Val Ile Pro Leu
 35 40 45
 Pro His Ile Tyr Gly Ala Arg Ile Lys Gly Val Glu Val Phe Cys Pro
 50 55 60
 Leu Asp Pro Pro Pro Pro Tyr Glu Ala Val Val Ser Gln Met Asp Gln
 65 70 75 80
 Glu Gln Gly Ser Ser Phe Gln Met Ser Glu Gly Ser Glu Ala Ala Val
 85 90 95
 Ile Pro Leu Asp Leu Gly Cys Thr Gln Val Thr Gln Asp Gly Asp Ile
 100 105 110
 Pro Asn Ile Pro Ala Glu Glu Asn Ala Ser Thr Ser Thr Pro Ser Ser
 115 120 125
 Thr Leu Val Arg Pro Ile Arg Ser Arg Arg Ala Leu Pro Pro Leu Arg
 130 135 140
 Thr Arg Ser Lys Ser Asp Pro Val Leu His Pro Ser Glu Glu Arg Ala
 145 150 155 160
 Ala Pro Val Leu Ser Cys Glu Ala Ala Thr Gln Thr Glu Arg Arg Leu
 165 170 175
 Asp Leu Ala Ala Val Thr Leu Arg Arg Gly Leu Arg Ser

180

185

<210> 3033
 <211> 821
 <212> DNA
 <213> Homo sapiens

<400> 3033
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 120
 tactatgata aattatttaa ggaatactgc atagcagatc tcagtaaata taaagaaaat
 180
 aagtttggat ttaggtggcg agtagaaaaa gaagtaattt caggaaaagg tcaatttttc
 240
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 300
 tatattgagc atggtgagaa gagaaatgca cttgttaaata taaggttatg ccaagaatgt
 360
 tccattaaat taaatttcca tcacaggaga aaagaaatca agtcaaaaaa aagaaaagat
 420
 aaaacccaaa aagactgtga agagtcacat cataaaaaat ccagattatc ttctgcagaa
 480
 gaggcctcca agaaaaaaga taaaggacat tcatcttcaa agaaatctga agattctcta
 540
 cttagaaact ctgatgagga agaaagtgtc tcagaatctg aactttggaa gggccacta
 600
 ccagagacag atgaaaaatc acaggaagaa gaatttgatg agtattttca ggatttggtt
 660
 ctatgagacg agagagagaa gcctccgctc cttaatgtga aacttcatga agttttaaac
 720
 ctcatgcaat ttgaaattcc atctacgtct ttatctgcaa gttacagctt ctgtgctttg
 780
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 821

<210> 3034
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 3034
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 Glu Asn His Arg Phe Leu Trp Asn Glu Asp Glu Met Asp Met Thr
 20 25 30
 Trp Glu Lys Arg Leu Ala Lys Lys Tyr Tyr Asp Lys Leu Phe Lys Glu
 35 40 45
 Tyr Cys Ile Ala Asp Leu Ser Lys Tyr Lys Glu Asn Lys Phe Gly Phe
 50 55 60
 Arg Trp Arg Val Glu Lys Glu Val Ile Ser Gly Lys Gly Gln Phe Phe
 65 70 75 80
 Cys Gly Asn Lys Tyr Cys Asp Lys Lys Glu Gly Leu Lys Ser Trp Glu

<400> 3035
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 120
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 180
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 240
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 780
 ccttgacaaa gttctgcgag ccatgtgtgg gagggccctg tcgtgggtctg aggacgtccc
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<210> 3036
 <211> 65
 <212> PRT
 <213> Homo sapiens

<400> 3036
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 Glu Cys Asn Gly Ala Ile Ser Ala His Cys Asn Leu Pro Leu Pro Gly
 20 25 30
 Ser Ser Asn Ser Pro Asp Pro His Ser Gly Pro Ala Pro Ser Gln Thr
 35 40 45
 Val Ile Leu Phe Leu Glu Gly Asn Arg Asp Pro Gly Gly Arg Gly Trp
 50 55 60
 Pro
 65

<210> 3037
 <211> 3538
 <212> DNA
 <213> Homo sapiens

<400> 3037
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 120
 ctcaagctca tagtagatgc ttctctacag cagttaccca actgtgtcaa ccgagatctg
 180
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 240
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 300
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 360
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 420
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 480
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 540
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 720
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 780
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 840
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 900

attcattgtg tagccaacct cttagcagga ctagtgctct accaagagga tgttgggac
960
cacgttgtgg atggagtgtt agaagatatt cgattaggaa tggagggtta tcaacctaaa
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1080
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1140
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1320
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1440
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1560
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1620
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1980
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2040
gcagaacaag aagagaggat gagaatgaaa aagctcacac tagatatcaa tgaacggcaa
2100
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2220
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2340
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2520

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 2760
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 2820
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 2880
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 2940
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 3360
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 caaaaactgt aaagtgttaa catttcacat ggaaatgctg cccaatcttc accagcttca
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<210> 3038

<211> 697

<212> PRT

<213> Homo sapiens

<400> 3038

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 Cys Met Asn Met Asn Thr Lys Ala Asn Arg Lys Lys Leu Val Arg Ala
 20 25 30
 Leu Phe Ile Val Pro Arg Gln Arg Leu Asp Leu Leu Pro Phe Tyr Ala
 35 40 45
 Arg Leu Val Ala Thr Leu His Pro Cys Met Ser Asp Val Ala Glu Asp
 50 55 60
 Leu Cys Ser Met Leu Arg Gly Asp Phe Arg Phe His Val Arg Lys Lys
 65 70 75 80
 Asp Gln Ile Asn Ile Glu Thr Lys Asn Lys Thr Val Arg Phe Ile Gly
 85 90 95
 Glu Leu Thr Lys Phe Lys Met Phe Thr Lys Asn Asp Thr Leu His Cys

2263

530		535		540
Met Met Leu Glu Asn Leu Gln Gln Arg Ser Gly Glu Ser Val Lys Val				
545		550		555
His Gln Leu Asp Val Ala Ile Pro Leu His Leu Lys Ser Gln Leu Arg				560
	565		570	575
Lys Gly Pro Pro Leu Gly Gly Gly Glu Gly Glu Ala Glu Ser Ala Asp				
	580		585	590
Thr Met Pro Phe Val Met Leu Thr Arg Lys Gly Asn Lys Gln Gln Phe				
	595		600	605
Lys Ile Leu Asn Val Pro Met Ser Ser Gln Leu Ala Ala Asn His Trp				
	610		615	620
Asn Gln Gln Gln Ala Glu Gln Glu Glu Arg Met Arg Met Lys Lys Leu				
625		630		635
Thr Leu Asp Ile Asn Glu Arg Gln Glu Glu Asp Tyr Gln Glu Met				640
	645		650	655
Leu Gln Ser Leu Ala Gln Arg Pro Ala Pro Ala Asn Thr Asn Arg Glu				
	660		665	670
Arg Arg Pro Arg Tyr Gln His Pro Lys Gly Ala Pro Asn Ala Asp Leu				
	675		680	685
Ile Phe Lys Thr Gly Gly Arg Arg Arg				
690		695		

<210> 3039

<211> 1836

<212> DNA

<213> Homo sapiens

<400> 3039

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120
tcgttagaat ctctcaccct gcttctcggt ctgatctgtg caagctcagt ctcttctgag
180
cctgcagcta cctccatccc tcatcgtagt gcaggccaaa ccaaatttta taaaattaac
240
aatttaaggt taaataagct taaataaggg tgtaaatac aagacacttc atcaaagctt
300
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360
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420
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480
gtatcttttt tttgttttta atcagaacac tgtaaatatt caggcaccat ttgttctctg
540
aaataaataa gtctctaagg taactgcac tgaactagt ttaaacacaa cagtgtcttt
600
tttttttttt aatcccccca caaagctttt ccaactatgt actatgcctc ctttcttatt
660
gctatggtaa tgtggctgtg gaaataaaac tactgtacat ccaaaaaaat agagcacctt
720
taacattaaa gtatatgtct gattatttgt tctcatgttt attttacaat actaaagccc
780

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 840
 caactatctt ccctcttgag gtaagcccaa gccagagcac tgttttagca gagtctaaaa
 900
 gaaaaagggtc tcaactgtcg ccagggttta cattcatctt cacaccagga gttacattca
 960
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 1140
 ggtcccttga tgaggtgcgg attggctaag attttttgtc gatggtggtg aaaaaccatt
 1200
 ctgtgaattt ccgcagctga gctgtcgcgg tctgggactc ctctgcagc ctcatgttgt
 1260
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 1320
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 1380
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 1440
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 1500
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 1620
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 1680
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 1740
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 1836

<210> 3040

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3040

Thr	Leu	Cys	His	Cys	Leu	Asp	Leu	His	Ile	Arg	Ala	Ala	Leu	Met	Pro
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Leu	Pro	Asp	Thr	Ala	Thr	Gly	Leu	Asp	Trp	Thr	His	Leu	Val	Asp	Ala
			20					25					30		
Ala	Arg	Ala	Phe	Glu	Asp	Gln	Arg	Val	Ala	Ser	Phe	Cys	Thr	Leu	Thr
			35				40					45			
Asp	Met	Gln	His	Gly	Gln	Asp	Leu	Glu	Gly	Ala	Gln	Glu	Leu	Pro	Leu
	50					55					60				
Cys	Val	Asp	Pro	Gly	Ser	Gly	Lys	Glu	Phe	Met	Asp	Thr	Thr	Gly	Glu
65					70					75				80	
Arg	Ser	Pro	Ser	Pro	Leu	Thr	Gly	Lys	Val	Asn	Gln	Leu	Glu	Leu	Ile

	85		90		95
Leu Arg Gln	Leu Gln Thr Asp	Leu Arg Lys Glu	Lys Gln Asp	Lys Ala	
	100	105	110		
Gly Leu Gln	Ala Glu Val Gln His	Leu Arg Gln Asp	Asn Met Arg	Leu	
	115	120	125		
Gln Glu Glu	Ser Gln Thr Ala Thr	Ala Gln Leu Arg	Lys Leu		
	130	135	140		

<210> 3041

<211> 1512

<212> DNA

<213> Homo sapiens

<400> 3041

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120
ccctcaacgt ccgcaggcgc gatgaaggca ctgatcttag tggggggcta tgggacgcgg
180
ctacggccgc tgacgctgag caccocgaag ccactgggtg acttctgcaa taagcccatc
240
ttgctgcacc aagtggaggc gctagccgcg gcaggcgtgg accacgtgat cctggccgtg
300
agctacatgt cgcagggtgt ggagaaggaa atgaaggcac aggagcagag gctgggaatc
360
cgaatctcca tgtcccatga agaggagcct ttggggacag ctggggccct ggcgctggcc
420
cgtgacctac tctctgagac tgcagacctt ttcttcgtcc tcaacagtga cgtgatctgc
480
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600
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660
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720
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780
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840
cagtcactga ggcagaagca gcctgagcgg ctgtgctcag gccctggcat tgtgggcaac
900
gtgctggtgg acccaagtgc ccgcacggc cagaactgca gcattggccc caatgtgagc
960
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1020
gatgcccga tccgttccca ttcttggtt gagtcctgca ttgtgggctg gcgctgccgc
1080
gtgggtcagt gggtagcat ggagaacgtg acagtgtgtg gtgaggacgt catagttaat
1140
gatgagctct acctcaacgg agccagcgtg ctgccccaca agtctattgg cgagtcagtg
1200

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ccagagcctc gtatcatcat gtgaggggat gcagtggggc tggccgagcc ccggttttcc
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 1320
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 1380
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 1440
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 1500
 aaaaaaaaaa aa
 1512

<210> 3042

<211> 360

<212> PRT

<213> Homo sapiens

<400> 3042

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Leu	Thr	Leu	Ser	Thr	Pro	Lys	Pro	Leu	Val	Asp	Phe	Cys	Asn	Lys	Pro
			20					25					30		
Ile	Leu	Leu	His	Gln	Val	Glu	Ala	Leu	Ala	Ala	Ala	Gly	Val	Asp	His
		35					40					45			
Val	Ile	Leu	Ala	Val	Ser	Tyr	Met	Ser	Gln	Val	Leu	Glu	Lys	Glu	Met
	50					55				60					
Lys	Ala	Gln	Glu	Gln	Arg	Leu	Gly	Ile	Arg	Ile	Ser	Met	Ser	His	Glu
65					70				75						80
Glu	Glu	Pro	Leu	Gly	Thr	Ala	Gly	Pro	Leu	Ala	Leu	Ala	Arg	Asp	Leu
			85					90						95	
Leu	Ser	Glu	Thr	Ala	Asp	Pro	Phe	Phe	Val	Leu	Asn	Ser	Asp	Val	Ile
			100					105						110	
Cys	Asp	Phe	Pro	Phe	Gln	Ala	Met	Val	Gln	Phe	His	Arg	His	His	Gly
		115					120						125		
Gln	Glu	Gly	Ser	Ile	Leu	Val	Thr	Lys	Val	Glu	Glu	Pro	Ser	Lys	Tyr
	130					135					140				
Gly	Val	Val	Val	Cys	Glu	Ala	Asp	Thr	Gly	Arg	Ile	His	Arg	Phe	Val
145					150					155					160
Glu	Lys	Pro	Gln	Val	Phe	Val	Ser	Asn	Lys	Ile	Asn	Ala	Gly	Met	Tyr
			165					170						175	
Ile	Leu	Ser	Pro	Ala	Val	Leu	Arg	Arg	Ile	Gln	Leu	Gln	Pro	Thr	Ser
			180					185						190	
Ile	Glu	Lys	Glu	Val	Phe	Pro	Ile	Met	Ala	Lys	Glu	Gly	Gln	Leu	Tyr
		195					200					205			
Ala	Met	Glu	Leu	Gln	Gly	Phe	Trp	Met	Asp	Ile	Gly	Gln	Pro	Lys	Asp
	210					215					220				
Phe	Leu	Thr	Gly	Met	Cys	Leu	Phe	Leu	Gln	Ser	Leu	Arg	Gln	Lys	Gln
225					230					235					240
Pro	Glu	Arg	Leu	Cys	Ser	Gly	Pro	Gly	Ile	Val	Gly	Asn	Val	Leu	Val
			245					250						255	
Asp	Pro	Ser	Ala	Arg	Ile	Gly	Gln	Asn	Cys	Ser	Ile	Gly	Pro	Asn	Val
			260				265						270		
Ser	Leu	Gly	Pro	Gly	Val	Val	Val	Glu	Asp	Gly	Val	Cys	Ile	Arg	Arg

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      275              280              285
Cys Thr Val Leu Arg Asp Ala Arg Ile Arg Ser His Ser Trp Leu Glu
 290              295              300
Ser Cys Ile Val Gly Trp Arg Cys Arg Val Gly Gln Trp Val Arg Met
 305              310              315              320
Glu Asn Val Thr Val Leu Gly Glu Asp Val Ile Val Asn Asp Glu Leu
      325              330              335
Tyr Leu Asn Gly Ala Ser Val Leu Pro His Lys Ser Ile Gly Glu Ser
      340              345              350
Val Pro Glu Pro Arg Ile Ile Met
      355              360

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<210> 3043

<211> 394

<212> DNA

<213> Homo sapiens

<400> 3043

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120
cttctctgac ctcaactcaa ctcacgtgtc ttgacactt taagggactt cctgttttag
180
ggtcttcttg ctgggtgtca ttgaatgggc agtgattctc taactttaga ctgatgttcc
240
ccagcctttg tttggggact cggaggcaga gtagacagtt acccttacct ctgggttggg
300
gagggtcata ttcttggtat cccagaggag tcaacagggg cttcattttt ctgagggact
360
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394

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<210> 3044

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3044

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Met Lys Pro Leu Leu Thr Ser Trp Gly Tyr Gln Glu Tyr Asp Pro Pro
 1              5              10              15
Gln Pro Arg Gly Lys Gly Asn Cys Leu Leu Cys Leu Arg Val Pro Lys
      20              25              30
Gln Arg Leu Gly Asn Ile Ser Leu Lys Leu Glu Asn His Cys Pro Phe
      35              40              45
Asn Asp Thr Gln Pro Glu Asp Pro Lys Thr Gly Ser Pro Leu Lys Cys
      50              55              60
Gln Arg His Val Ser Trp Ser Glu Val Arg Glu Ala Asp Ser Gly Leu
      65              70              75              80
Leu Leu Gly Gln Thr Pro Val Lys Arg Lys Arg Trp His His Glu Thr
      85              90              95
Ser Ser Phe Ser Pro Cys Leu Trp Leu Lys Ala Arg Ala Ser Arg Ser
      100              105              110
Lys Glu Ile

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115

<210> 3045
 <211> 605
 <212> DNA
 <213> Homo sapiens

<400> 3045
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 120
 tcttgggagc cgctggcttg cttatgcaga aaacaagttg attcgatgtc atcagtcccg
 180
 tgggtggagcc tgtggagaca acattcagtc ttatactgcc acagtcatta gtgctgctaa
 240
 aacattgaaa agtggcctga caatggtagg gaaagtggg actcagctga caggcacact
 300
 gccttcaggt gtgacagaag atgatgttgc catccacagt aattcacggc ggagtccttt
 360
 ggtcccaggc atcatcacag ttattgacac cgaaaccgtg gagagggccca ggtgtttgtg
 420
 agtgaggatc ttgacagtga tggcattgtg gcccaactcc ctgcccata gaagccagtg
 480
 tgctgcatgg cttttaatac aagtggaaatg cttctagtca caacagacac ctttgccat
 540
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 600
 cgcgt
 605

<210> 3046
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 3046
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 1 5 10 15
 Ser Asp Gly Ile Val Ala His Phe Pro Ala His Glu Lys Pro Val Cys
 20 25 30
 Cys Met Ala Phe Asn Thr Ser Gly Met Leu Leu Val Thr Thr Asp Thr
 35 40 45
 Leu Gly His Asp Phe His Val Phe Gln Ile Leu Thr His Pro Trp Ser
 50 55 60
 Ser Ser Thr Glu Arg Arg Gln Arg
 65 70

<210> 3047
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 3047

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 120
 ttggttgagt caggaattca gtttatggat gagccagaaa tggcagtgtt tctgcagaat
 180
 gccaaaaacc tgctaaaaaa aatctcggaa gcatcaaagg catttcagat ggagaaaata
 240
 gaacatggct atgagaacat gaaccacttc acagtcaacc tcaatagaga agaaaagata
 300
 atacgtgaaa ttgactttta cagagaagat gaagatgaag aagaagaaga aggcggagaa
 360
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 391

<210> 3048

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3048

Met	Thr	Gln	Val	Ile	Thr	Arg	Thr	Gln	Glu	Glu	Lys	Leu	Glu	His	Val
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Arg	Ala	Leu	Ile	Lys	Lys	Tyr	Ser	Asp	His	Leu	Glu	Asn	Val	Ser	Lys
		20					25					30			
Leu	Val	Glu	Ser	Gly	Ile	Gln	Phe	Met	Asp	Glu	Pro	Glu	Met	Ala	Val
		35				40						45			
Phe	Leu	Gln	Asn	Ala	Lys	Thr	Leu	Leu	Lys	Lys	Ile	Ser	Glu	Ala	Ser
		50			55					60					
Lys	Ala	Phe	Gln	Met	Glu	Lys	Ile	Glu	His	Gly	Tyr	Glu	Asn	Met	Asn
65				70					75					80	
His	Phe	Thr	Val	Asn	Leu	Asn	Arg	Glu	Glu	Lys	Ile	Ile	Arg	Glu	Ile
			85				90						95		
Asp	Phe	Tyr	Arg	Glu	Asp	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Gly	Gly	Glu
		100				105						110			
Gly	Glu	Lys	Glu	Glu	Lys	Glu	Lys	Trp	Glu						
		115				120									

<210> 3049

<211> 599

<212> DNA

<213> Homo sapiens

<400> 3049

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 120
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 180
 tcgatattgt acctggaagg ctcggtcttt gtgtttgagg acatcttcag attgattgag
 240
 ttctactgtg tcagtagaga cttactgccc ttcacactgc ggctacccca ggccatcctt
 300

gaggccagca gcttcacgga ccttgagacc atcgccaacc tgggtctggg tttctgggac
 360
 tcctcgctga atcctccaca agaaagaggg aagccagcag agccccaag agaccgggac
 420
 cccggattcc ccctagtctc cagcctcagg cccacagccc atgacgcaaa ctgtgcctgt
 480
 gaaatcgagc tgctcggtagg aaatgaccgc ctgtgggttg tgaatcctat tttcatcgag
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 599

<210> 3050

<211> 177

<212> PRT

<213> Homo sapiens

<400> 3050

Met	Phe	Leu	Val	Arg	Arg	Asp	Ser	Ser	Ser	Lys	Gln	Leu	Val	Leu	Cys
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Val	His	Phe	Pro	Ser	Leu	Asn	Glu	Ser	Ser	Ala	Glu	Val	Leu	Glu	Tyr
			20					25					30		
Thr	Ile	Lys	Glu	Glu	Lys	Ser	Ile	Leu	Tyr	Leu	Glu	Gly	Ser	Ala	Leu
		35				40						45			
Val	Phe	Glu	Asp	Ile	Phe	Arg	Leu	Ile	Ala	Phe	Tyr	Cys	Val	Ser	Arg
	50					55				60					
Asp	Leu	Leu	Pro	Phe	Thr	Leu	Arg	Leu	Pro	Gln	Ala	Ile	Leu	Glu	Ala
65					70					75				80	
Ser	Ser	Phe	Thr	Asp	Leu	Glu	Thr	Ile	Ala	Asn	Leu	Gly	Leu	Gly	Phe
				85					90					95	
Trp	Asp	Ser	Ser	Leu	Asn	Pro	Pro	Gln	Glu	Arg	Gly	Lys	Pro	Ala	Glu
			100					105					110		
Pro	Pro	Arg	Asp	Arg	Ala	Pro	Gly	Phe	Pro	Leu	Val	Ser	Ser	Leu	Arg
		115				120						125			
Pro	Thr	Ala	His	Asp	Ala	Asn	Cys	Ala	Cys	Glu	Ile	Glu	Leu	Ser	Val
		130				135					140				
Gly	Asn	Asp	Arg	Leu	Trp	Phe	Val	Asn	Pro	Ile	Phe	Ile	Glu	Asp	Cys
145				150					155					160	
Ser	Ser	Ala	Leu	Pro	Thr	Asp	Gln	Pro	Pro	Leu	Gly	Asn	Cys	Pro	Ser
				165				170						175	

Arg

<210> 3051

<211> 820

<212> DNA

<213> Homo sapiens

<400> 3051

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 120
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 180

tcctcggcca ccgtcgaca acaggcctcc tcctccccag tccctggagg gactccgaca
 240
 gatgcactat caccgncaac gactatgaca agtcacccat caagcccaaa atgtggagtg
 300
 agtcctcttt agatgaaccc tatgagaagg tcaagaagcg ctctcttcac agccattcca
 360
 gcagccacaa gcgcttcccc agcacaggaa gctgtgcgga agccggcgga ggaagcaact
 420
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 480
 ccacgccaga cctgcgggtc cggagtcccc actacgtcca ttccacgagg tcggtggaca
 540
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 720
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 780
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 820

<210> 3052

<211> 62

<212> PRT

<213> Homo sapiens

<400> 3052

Arg	Leu	Ser	Gly	Tyr	Gln	His	Asn	Ile	Pro	Pro	Thr	Phe	Ser	Ser	Gln
1				5				10					15		
Gly	Thr	Pro	Ser	Ser	Ala	Thr	Val	Ala	Gln	Gln	Ala	Ser	Ser	Ser	Pro
		20					25					30			
Val	Pro	Gly	Gly	Thr	Pro	Thr	Asp	Ala	Leu	Ser	Pro	Xaa	Thr	Thr	Met
		35				40					45				
Thr	Ser	His	Pro	Ser	Ser	Pro	Lys	Cys	Gly	Val	Ser	Pro	Leu		
	50					55					60				

<210> 3053

<211> 2625

<212> DNA

<213> Homo sapiens

<400> 3053

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<211> 417

<212> PRT

<213> Homo sapiens

<400> 3054

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Pro	Leu	Tyr	Gln	Asn	Phe	Tyr	Glu	Glu	Arg	Ala	Arg	Tyr	Leu	Gln	Thr
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Ile	Val	Gln	His	His	Leu	Glu	Pro	Thr	Thr	Phe	Glu	Asp	Phe	Ala	Ala
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<210> 3055

<211> 905

<212> DNA

<213> Homo sapiens

<400> 3055

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<211> 195

<212> PRT

<213> Homo sapiens

<400> 3056

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Cys	Ile	Phe	Tyr	Asp	Glu	Asn	Thr	Lys	His	Tyr	Glu	Leu	Leu	Asn	Tyr
		35					40					45			
Ser	Glu	His	Gly	Thr	Thr	Val	Asp	Asn	Val	Leu	Tyr	Ser	Cys	Asp	Phe
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Ser	Glu	Lys	Thr	Pro	Pro	Thr	Pro	Pro	Ser	Ser	Ile	Val	Ala	Lys	Val
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Gln	Ser	Val	Ile	Arg	Arg	Arg	Arg	His	Gln	Lys	Gln	Asp	Glu	Glu	Pro
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Ser	Glu	Glu	Ala	Ala	Met	Met	Ser	Ser	Gln	Ala	Gln	Gly	Pro	Gln	Arg
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Lys	Leu	Gly	Cys	Leu	Gln	Phe	Val	Phe	Ser	Ile	Thr	Glu	Phe	Ala	Thr
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<212> DNA

<213> Homo sapiens

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<211> 298

<212> PRT

<213> Homo sapiens

<400> 3058

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225	230	235
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<210> 3059

<211> 1411

<212> DNA

<213> Homo sapiens

<400> 3059

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<210> 3060

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3060

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<210> 3061

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<212> DNA

<213> Homo sapiens

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<210> 3062

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3062

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		20					25					30			
Ser	Ser	Ser	Phe	Arg	Leu	Leu	Gln	Glu	Ala	Leu	Glu	Ala	Glu	Glu	Arg
	35					40					45				
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	100				105					110					
Asn	Leu	Lys	Met	Arg	Gly	His	Phe	Trp	Val	Gly	Asp	Glu	Leu	Tyr	Cys
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<210> 3063

<211> 386

<212> DNA

<213> Homo sapiens

<400> 3063

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<210> 3064

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3064

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			20					25					30		
Tyr	Gln	Cys	Ser	Arg	Pro	Ala	Pro	Leu	His	Ser	Arg	Asp	Leu	His	Ser
			35					40				45			
Met	Ile	Val	Ala	Ala	Phe	Gln	Cys	Leu	Cys	Val	Trp	Leu	Thr	Glu	His
	50					55					60				
Pro	Asp	Met	Leu	Asp	Glu	Lys	Asp	Tyr	Leu	Lys	Glu	Val	Leu	Glu	Ile
65					70					75				80	
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				85				90						95	
Val	Lys	Tyr	Lys	Gly	Asp	Lys	Glu	Pro	Asn	Pro	Ala	Ser	Met	Arg	Val
			100					105					110		
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<210> 3065

<211> 2104

<212> DNA

<213> Homo sapiens

<400> 3065

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2104

<210> 3066
<211> 183
<212> PRT
<213> Homo sapiens

<400> 3066
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Pro Val Gly Glu Glu Ser Ile Ser Asp Ala Glu Lys Val Ala Met Xaa
50 55 60
Ser Gln Gly Pro Xaa Thr Ala Pro Gly Ser Pro Cys Arg Ser Cys Gly
65 70 75 80
Thr Cys Cys Thr Arg Gly Thr Xaa Leu Lys Ser Lys Val Phe Leu Leu
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Gln Glu Glu Leu Ala Tyr Tyr Lys Ser Glu Glu Met Glu Glu Asn
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Arg Ile Pro Gln Pro Pro Pro Ile Ala His Pro Arg Thr Ser Pro Gln
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130 135 140
Lys Arg Leu Ala Asn Thr Gln Arg Asn Val His Ile Gln Glu Ser Phe
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<210> 3067
<211> 645
<212> DNA
<213> Homo sapiens

<400> 3067
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<210> 3068

<211> 204

<212> PRT

<213> Homo sapiens

<400> 3068

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Ser	Pro	Asn	Arg	Ala	Gln	Gly	Pro	Ser	Xaa	Val	Leu	Val	His	Gln	Ala
		35					40					45			
Arg	Glu	Pro	Thr	Ala	Gly	Ser	Pro	Pro	Cys	Ser	Leu	Pro	Arg	Pro	Asp
	50					55					60				
Leu	Gln	Pro	Pro	Ser	Thr	Pro	Pro	Pro	Pro	Val	His	Lys	Glu	Gln	Lys
65				70						75				80	
Lys	Ser	Asp	Pro	Pro	Pro	Pro	Pro	Pro	Gly	Lys	Phe	Lys	Ser	Phe	Leu
			85					90						95	
Pro	Pro	Arg	Ser	Pro	Gly	Asn	Ser	Ala	Leu	Gly	Pro	Arg	Arg	Gly	Trp
		100						105					110		
Gly	Trp	Ile	Ala	Ala	Gly	Gly	Ala	Pro	Ala	Met	Pro	Arg	Pro	Pro	Ser
	115						120					125			
Gly	Ala	Gly	Asp	Arg	Glu	Ile	Pro	Arg	Asp	Leu	Ala	Cys	Ala	Pro	Tyr
	130					135				140					
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Arg	Arg	Cys	Gly	Ser	Lys	Glu	Pro	Glu	Ala	Ala	Ala	Ser	Arg	Pro	Pro
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<211> 1561

<212> DNA

<213> Homo sapiens

<400> 3069

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<210> 3070

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3070

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Tyr Phe Gln Val Leu Cys Val Ala Asp Val Val Ile Ser Thr Ala Lys
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His Glu Phe Phe Gly Val Ala Met Leu Glu Ala Val Tyr Cys Gly Cys
65           70           75           80
Tyr Pro Leu Cys Pro Lys Asp Leu Val Tyr Pro Glu Ile Phe Pro Ala
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      100           105           110
Phe Cys Lys Arg Pro Asp Ile Ile Arg Lys His Leu Tyr Lys Gly Glu
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<212> DNA

<213> Homo sapiens

<400> 3071

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<210> 3072

<211> 349

<212> PRT

<213> Homo sapiens

<400> 3072

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Pro	Arg	Leu	Leu	Ser	Gly	Pro	Ser	Gln	Glu	Ser	Pro	Gln	Thr	Leu	Gly
		20					25					30			
Lys	Glu	Ser	Arg	Gly	Leu	Arg	Gln	Gln	Gly	Thr	Ser	Val	Ala	Gln	Ser
		35				40					45				
Gly	Ala	Gln	Ala	Pro	Gly	Arg	Ala	His	Arg	Cys	Ala	His	Cys	Arg	Arg
	50				55				60						
His	Phe	Pro	Gly	Trp	Val	Ala	Leu	Trp	Leu	His	Thr	Arg	Arg	Cys	Gln
65				70				75						80	
Ala	Arg	Leu	Pro	Leu	Pro	Cys	Pro	Glu	Cys	Gly	Arg	Arg	Phe	Arg	His
		85					90				95				
Ala	Pro	Phe	Leu	Ala	Leu	His	Arg	Gln	Val	His	Ala	Ala	Ala	Thr	Pro
		100					105				110				
Asp	Leu	Gly	Phe	Ala	Cys	His	Leu	Cys	Gly	Gln	Ser	Phe	Arg	Gly	Trp


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Val Ala Leu Val Leu His Leu Arg Ala His Ser Ala Ala Lys Arg Pro
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Ile Ala Cys Pro Lys Cys Glu Arg Arg Phe Trp Arg Arg Lys Gln Leu
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Arg Ala His Leu Arg Arg Cys His Pro Pro Ala Pro Glu Ala Arg Pro
      165              170              175
Phe Ile Cys Gly Asn Cys Gly Arg Ser Phe Ala Gln Trp Asp Gln Leu
      180              185              190
Val Ala His Lys Arg Val His Val Ala Glu Ala Leu Glu Glu Ala Ala
      195              200              205
Ala Lys Ala Leu Gly Pro Arg Pro Arg Gly Arg Pro Ala Val Thr Ala
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Pro Arg Pro Gly Gly Asp Ala Val Asp Arg Pro Phe Gln Cys Ala Cys
      225              230              235              240
Cys Gly Lys Arg Phe Arg His Lys Pro Asn Leu Ile Ala His Arg Arg
      245              250              255
Val His Thr Gly Glu Arg Pro His Gln Cys Pro Glu Cys Gly Lys Arg
      260              265              270
Phe Thr Asn Lys Pro Tyr Leu Thr Ser His Arg Arg Ile His Thr Gly
      275              280              285
Glu Lys Pro Tyr Pro Cys Lys Glu Cys Gly Arg Arg Phe Arg His Lys
      290              295              300
Pro Asn Leu Leu Ser His Ser Lys Ile His Xaa Ser Asp Pro Arg Gly
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Pro Arg Ser Pro Arg Pro Ser Pro Pro Arg Arg Tyr Leu
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<210> 3073

<211> 791

<212> DNA

<213> Homo sapiens

<400> 3073

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420
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<210> 3074

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3074

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			20					25					30		
Ser	Cys	Glu	Phe	Leu	Leu	Ala	Gly	Ala	Gly	Gly	Ala	Gly	Ala	Gly	Ala
		35					40					45			
Ala	Pro	Gly	Pro	His	Leu	Pro	Pro	Arg	Gly	Ser	Val	Pro	Gly	Asp	Pro
	50					55					60				
Val	Arg	Ile	His	Cys	Asn	Ile	Thr	Glu	Ser	Tyr	Pro	Ala	Val	Pro	Pro
65					70					75				80	
Ile	Trp	Ser	Val	Glu	Ser	Asp	Asp	Pro	Asn	Leu	Ala	Ala	Val	Leu	Glu
			85						90					95	
Arg	Leu	Val	Asp	Ile	Lys	Lys	Gly	Asn	Thr	Leu	Leu	Leu	Gln	His	Leu
			100					105						110	
Lys	Arg	Ile	Ile	Ser	Asp	Leu	Cys	Lys	Leu	Tyr	Asn	Leu	Pro	Gln	His
		115				120						125			
Pro	Asp	Val	Glu	Met	Leu	Asp	Gln	Pro	Leu	Pro	Ala	Glu	Gln	Cys	Thr
		130				135					140				
Gln	Glu	Asp	Val	Ser	Ser	Glu	Asp	Glu	Asp	Glu	Glu	Met	Pro	Glu	Asp
145				150						155				160	
Thr	Glu	Asp	Leu	Asp	His	Tyr	Glu	Met	Lys	Glu	Glu	Glu	Pro	Ala	Glu
			165						170					175	
Gly	Lys	Lys	Ser	Glu	Asp	Asp	Gly	Ile	Gly	Lys	Glu	Asn	Leu	Ala	Ile
			180					185					190		
Leu	Glu	Lys	Ile	Lys	Lys	Asn	Gln	Arg	Gln	Asp	Tyr	Leu	Asn	Gly	Ala
		195				200						205			
Val	Ser	Gly	Ser	Val	Gln	Ala	Thr	Asp	Arg	Leu	Met	Lys	Glu	Leu	Gln
		210				215					220				
Gly	Tyr	Ile	Thr	Xaa	Ser	Gln	Ser	Phe	Lys	Gly	Gly	Asn	Tyr	Xaa	Ser
225				230						235				240	
Ser	Asn	Ser	Trp	Asn	Asp	Ser	Leu	Tyr	Gly	Trp	Asp	Val	Gln	Leu	Leu
			245					250						255	
Lys	Val	Asp	Gln	Gly	Ser	Val									
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<210> 3075

<211> 603

<212> DNA

<213> Homo sapiens

<400> 3075

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180
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300
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420
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<210> 3076

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3076

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20          25          30
Val Gly Pro Gln Lys Lys Lys Lys Lys Lys Lys Val Leu Gly Gly
35          40          45
Gly Arg Phe Gly Gln Val His Arg Cys Thr Glu Lys Ser Thr Gly Leu
50          55          60
Ala Leu Ala Ala Lys Ile Ile Lys Val Lys Asn Val Lys Asp Arg Glu
65          70          75          80
Asp Val Lys Asn Glu Val Asn Ile Met Asn Gln Leu Ser His Val Asn
85          90          95
Leu Ile Gln Leu Tyr Asp Ala Phe Glu Ser Lys Ser Ser Phe Thr Leu
100         105         110
Ile Met Glu Tyr Val Asp Gly Gly Glu Leu Phe Asp Arg Ile Thr Asp
115         120         125
Glu Lys Tyr His Leu Thr Glu Leu Asp Val Val Leu Phe Thr Arg Gln
130         135         140
Ile Cys Glu Gly Val His Tyr Leu His Gln His Tyr Ile Leu His Leu
145         150         155         160
Asp Leu Lys Pro Glu Asn Ile Leu Cys Val Ser Gln Thr Gly His Gln

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<210> 3077
 <211> 1377
 <212> DNA
 <213> Homo sapiens

<400> 3077
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<210> 3078

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3078

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		20					25					30		Thr
Val	Gly	Ala	Leu	Pro	Arg	Gly	Pro	Arg	Gln	Asn	Ser	Arg	Leu	Gly
		35				40					45			Leu
Pro	Leu	Leu	Leu	Met	Pro	Glu	Glu	Ala	Arg	Leu	Leu	Ala	Glu	Ile
		50				55				60				Gly
Ala	Val	Thr	Leu	Val	Ser	Ala	Pro	Arg	Pro	Asp	Ser	Arg	His	Ser
65					70					75			80	
Leu	Ala	Leu	Thr	Ser	Phe	Lys	Arg	Gln	Gln	Glu	Glu	Ser	Phe	Gln
			85					90					95	Glu
Gln	Ser	Ala	Leu	Ala	Ala	Glu	Ala	Arg	Glu	Thr	Arg	Arg	Gln	Glu
		100					105					110		Leu
Leu	Glu	Lys	Ile	Thr	Glu	Gly	Gln	Ala	Ala	Lys	Lys	Gln	Lys	Leu
		115					120					125		Glu
Gln	Ala	Ser	Gly	Ala	Ser	Ser	Ser	Gln	Glu	Ala	Gly	Ser	Ser	Gln
		130				135					140			Ala
Ala	Lys	Glu	Asp	Glu	Thr	Ser	Asp	Gly	Gln	Ala	Ser	Gly	Glu	Gln
145					150					155				160
Glu	Ala	Gly	Pro	Ser	Ser	Ser	Gln	Ala	Gly	Pro	Ser	Asn	Gly	Val
			165					170				175		Ala
Pro	Leu	Pro	Arg	Ser	Ala	Leu	Leu	Val	Gln	Leu	Ala	Thr	Ala	Arg
		180					185					190		Pro
Arg	Pro	Val	Lys	Ala	Arg	Pro	Leu	Asp	Trp	Arg	Val	Gln	Ser	Lys
		195					200					205		Asp
Trp	Pro	His	Ala	Gly	Arg	Pro	Ala	His	Glu	Leu	Arg	Tyr	Ser	Ile
		210				215					220			Tyr
Arg	Asp	Leu	Trp	Glu	Arg	Gly	Phe	Phe	Leu	Ser	Ala	Ala	Gly	Lys
225					230					235				Phe
Gly	Gly	Asp	Phe	Leu	Val	Tyr	Pro	Gly	Asp	Pro	Leu	Arg	Phe	His
			245					250					255	Ala
His	Tyr	Ile	Ala	Gln	Cys	Trp	Ala	Pro	Glu	Asp	Thr	Ile	Pro	Leu
		260					265					270		Gln
Asp	Leu	Val	Ala	Ala	Gly	Arg	Leu	Gly	Thr	Ser	Val	Arg	Lys	Thr
		275					280					285		Leu
Leu	Leu	Cys	Ser	Pro	Gln	Pro	Asp	Gly	Lys	Val	Val	Tyr	Thr	Ser
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Gln	Trp	Ala	Ser	Leu	Gln									
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<210> 3079

<211> 1785

<212> DNA

<213> Homo sapiens

<400> 3079

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<210> 3080
<211> 500
<212> PRT
<213> Homo sapiens
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 325 330 335
 Leu Ala Leu Asn Leu His Leu Pro Ala Ala Asp Gln Asn Val Ile Met
 340 345 350
 Ala Ala Leu Ser Lys His Ala Asn Val Lys Ile Phe Ser Glu Lys Leu
 355 360 365
 Leu Leu Leu Leu Asn Arg Gly Asp Asp Pro Val Arg Ile Phe Lys His
 370 375 380
 Glu Pro Gln Pro Pro His Ser Val Leu Lys Phe Leu Gln Asp Val Phe
 385 390 395 400
 Gly Ser Pro Ala Thr Ala Ala Ile Phe Tyr His Thr Asp Met Met Ala
 405 410 415
 Leu Ile Asp Ile Thr Val Arg His Ile Ala Asp Leu Ser Pro Gly Asp
 420 425 430
 Lys Gly Pro Phe Gly Ala Gly Gln Arg Pro Trp Pro Gly Val Pro Arg
 435 440 445
 Leu Leu Glu Pro Gly Ser Thr Pro Ser Arg Glu Pro His Pro Val Glu
 450 455 460
 Arg Ser Gly Val Pro Ala Leu Thr Ser Ser Trp Ala Ser Gly Cys Pro
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<210> 3081
 <211> 1902
 <212> DNA
 <213> Homo sapiens

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 1902

<210> 3082

<211> 414

<212> PRT

<213> Homo sapiens

<400> 3082

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      50      55      60
Cys Asn Tyr Leu Val Gln Glu Asp Phe Val Pro Phe Leu Gln Asp Val
      65      70      75      80
Val Asn Thr His Pro Gly Leu Ser Phe Leu Lys Glu Ala Ser Glu Phe
      85      90      95
His Ser Arg Tyr Ile Thr Thr Val Ile Gln Arg Ile Phe Tyr Ala Val
      100      105      110
Asn Arg Ser Trp Ser Gly Arg Ile Thr Cys Ala Glu Leu Arg Arg Ser
      115      120      125
Ser Phe Leu Gln Asn Val Ala Leu Leu Glu Glu Glu Ala Asp Ile Asn
      130      135      140
Gln Leu Thr Glu Phe Phe Ser Tyr Glu His Phe Tyr Val Ile Tyr Cys
      145      150      155      160
Lys Phe Trp Glu Leu Asp Thr Asp His Asp Leu Leu Ile Asp Ala Asp
      165      170      175
Asp Leu Ala Arg His Asn Asp His Ala Leu Ser Thr Lys Met Ile Asp
      180      185      190
Arg Ile Phe Ser Gly Ala Val Thr Arg Gly Arg Lys Val Gln Lys Glu
      195      200      205
Gly Lys Ile Ser Tyr Ala Asp Phe Val Trp Phe Leu Ile Ser Glu Glu
      210      215      220
Asp Lys Lys Thr Pro Thr Ser Ile Glu Tyr Trp Phe Arg Cys Met Asp
      225      230      235      240
Leu Asp Gly Asp Gly Ala Leu Ser Met Phe Glu Leu Glu Tyr Phe Tyr
      245      250      255
Glu Glu Gln Cys Arg Arg Leu Asp Ser Met Ala Ile Glu Ala Leu Pro
      260      265      270
Phe Gln Asp Cys Leu Cys Gln Met Leu Asp Leu Val Lys Pro Arg Thr
      275      280      285
Glu Gly Lys Ile Thr Leu Gln Asp Leu Lys Arg Cys Lys Leu Ala Asn
      290      295      300
Val Phe Phe Asp Thr Phe Phe Asn Ile Glu Lys Tyr Leu Asp His Glu
      305      310      315      320
Gln Lys Glu Gln Ile Ser Leu Leu Arg Asp Gly Asp Ser Gly Gly Pro
      325      330      335
Glu Leu Ser Asp Trp Glu Lys Tyr Ala Ala Glu Glu Tyr Asp Ile Leu
      340      345      350
Val Ala Glu Glu Thr Val Gly Glu Pro Trp Glu Asp Gly Phe Glu Ala
      355      360      365
Glu Leu Ser Pro Val Glu Gln Lys Leu Ser Ala Leu Arg Ser Pro Leu
      370      375      380
Ala Gln Arg Pro Phe Phe Glu Ala Pro Ser Pro Leu Gly Ala Val Asp
      385      390      395      400
Leu Tyr Glu Tyr Ala Cys Gly Asp Glu Asp Leu Glu Pro Leu
      405      410

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<210> 3083

<211> 610.

<212> DNA

<213> Homo sapiens

<400> 3083

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 120
 gactgggcag gccgggcccg ggcaactggt ggtgacagtc atacttcgtg gagcccagcg
 180
 agcatcccgg gcaagcacta ccaggctgtg ggtctgcacc tctggaaggt agagaagcgg
 240
 cgggtcaatc tgcctagggt cctgtccatg cccccgtgg ctggcaccgc gtgccatgca
 300
 tacgaccggg aggtccacct gcgttgtgag ctctcaccgg gctactacct ggctgtcccc
 360
 agcaccttcc tgaaggacgc gccaggggag ttctgtctcc gactcttctc taccgggcga
 420
 gtctccctta ggtgagagga accgcgcagt gctgctggct ctccgaggcc acaggccctt
 480
 ccaaggcagg atttgggcac tttccctctg tggttggcag gtgtccatgt gggaactgag
 540
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 600
 gcagtggcca
 610

<210> 3084

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3084

Xaa	Arg	Pro	Ser	Cys	Trp	Glu	Pro	Val	Arg	Pro	Ser	Gly	Ser	Ser	His
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Leu	Ser	Trp	His	Arg	Gly	Pro	Pro	Cys	Glu	Val	Tyr	Ile	Ala	Val	Leu
			20					25					30		
Gln	Arg	Ser	Arg	Leu	His	Ala	Ala	Asp	Trp	Ala	Gly	Arg	Ala	Arg	Ala
			35				40					45			
Leu	Val	Gly	Asp	Ser	His	Thr	Ser	Trp	Ser	Pro	Ala	Ser	Ile	Pro	Gly
			50			55				60					
Lys	His	Tyr	Gln	Ala	Val	Gly	Leu	His	Leu	Trp	Lys	Val	Glu	Lys	Arg
65					70				75					80	
Arg	Val	Asn	Leu	Pro	Arg	Val	Leu	Ser	Met	Pro	Pro	Val	Ala	Gly	Thr
				85				90					95		
Ala	Cys	His	Ala	Tyr	Asp	Arg	Glu	Val	His	Leu	Arg	Cys	Glu	Leu	Ser
			100				105					110			
Pro	Gly	Tyr	Tyr	Leu	Ala	Val	Pro	Ser	Thr	Phe	Leu	Lys	Asp	Ala	Pro
		115				120					125				
Gly	Glu	Phe	Leu	Leu	Arg	Val	Phe	Ser	Thr	Gly	Arg	Val	Ser	Leu	Arg
		130				135					140				

<210> 3085

<211> 1080

<212> DNA

<213> Homo sapiens

<400> 3085

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 120
 caaaagataa gaaaatggaa attaagggaa atctgttcag caacaaagat cttgaggaat
 180
 tatgcagaca tatcaacaac agaaaccaag cagcacagca ttctcagaag cagtctactg
 240
 agctcttcca gtgcatgtac ttcaaagaca aagaccctgc caccgaggag cgttgcatat
 300
 ctgacggagt tatttattca attagaacaa atgggtgtgct tctatttata ccaagggttg
 360
 ggattaaagg tgctgcttat ctaaaaaata aagatggttt agtcatctca tgtggcccag
 420
 atagctgttc tgaatggaaa ccaggatccc ttcaacgatt tcaaaacaaa attacctcta
 480
 ctacaacaga tggggaatct gttacgttcc atttgtttga ccatgtaacc gtaagaatat
 540
 ccatacaggc ctcacgttgc cattctgata caatcagact tgaaataatt agtaacaaac
 600
 catacaagat accaaatata gaacttattc atcagagttc ccccttgctg aagagtggagt
 660
 tagtgaaaga agtaactaaa tctgtggaag aagctcagct tgccaagaa gtcaaagtaa
 720
 acatcattca ggaggaatat caagaatatc gccaaacaaa gggaaggagc ctatacacac
 780
 ttctagagga gatacgggac ctagctctcc tggatgtttc aaacaattat ggaatatgag
 840
 aggtctttac ttcactaaga gctgtcatat gtgaatgttt tacagtcttt tcaaacttaa
 900
 catttaatgt gtgtcactca gtgctctagt cgatcaggac tgggtagcta tttcgcatat
 960
 atgtanaatg ttctcagccg ggcacggtgg ctcacgcctg taaccccagc actttgggag
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 1080

<210> 3086

<211> 58

<212> PRT

<213> Homo sapiens

<400> 3086

Met Cys Val Thr Gln Cys Ser Ser Arg Ser Gly Leu Gly Ser Tyr Phe
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 Ala Tyr Met Xaa Asn Val Leu Ser Arg Ala Arg Trp Leu Thr Pro Val
 20 25 30
 Thr Pro Ala Leu Trp Glu Ala Glu Ala Gly Gly Ser Arg Gly Gln Glu
 35 40 45
 Ile Glu Thr Ile Leu Ala Asn Thr Val Lys
 50 55

<210> 3087
<211> 2329
<212> DNA
<213> Homo sapiens

<400> 3087
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120
gtggaggtgg agccgcccc agatcgcca gtccgagcgt gccggacaca gcagccggaa
180
atggagcgca cccatattca gcaactcctg gaacacttcc tccgccagct tcagagaaaa
240
gatccccatg gattttttgc ttttcctgtc acggatgcaa ttgctcctgg atattcaatg
300
ataataaaac atcccatgga ttttggcacc atgaaagaca aaattgtagc taatgaatac
360
aagtcagtta cggaatttaa ggcagatttc aagctgatgt gtgataatgc aatgacatac
420
aataggccag ataccgtgta ctacaagttg gcgaagaaga tccttcacgc aggctttaag
480
atgatgagca aacaggcagc tcttttgggc aatgaagata cagctgttga ggaacctgtc
540
cctgaagttg taccagtaca agtagaaact gccaaagaaat ccaaaaagcc gagtagagaa
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gttatcagct gcatgtttga gcctgaaggg aatgcctgca gcttgacgga cagtaccgca
660
gaggagcacg tgctggcgct ggtggagcac gcagctgacg aagctcggga caggatcaac
720
cggttcctcc caggcggcaa gatgggctat ctgaagagga acggggacgg gagcctgctc
780
tacagcgtgg tcaacacggc cgagccgaac gctgatgagg aggagacca cccggtgact
840
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900
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960
cagtatttgg cgacttgaag tcggacgaga tggagctgct ctactcagcc tacggagatg
1020
agacaggcgt gcagtgtgcg ctgagcctgc aggagtttgt gaaggatgct gggagctaca
1080
gcaagaaagt ggtggacgac ctctggacc agatcacagg cggagaccac tctaggacgc
1140
tcttcagct gaagcagaga agaaatgttc ccatgaagcc tccagatgaa gccaaaggtg
1200
gggacacctt aggagacagc agcagctctg ttctggagtt catgtcgatg aagtcctatc
1260
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1320
accctgacga cagccatttg aacttgatg agacgacgaa gtcctgcag gacctgcagc
1380
aagcacaggc ggagcgcggc ggctctcggc cgctctccaa cctcagctcc ctgtccaacg
1440

cctccgagag ggaccagcac cacctgggaa gcccttctcg cctgagtgtc ggggagcagc
 1500
 cagacgtcac ccacgacccc tatgagtttc ttcagtctcc agagcctgcg gcctctgcca
 1560
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 1620
 gtgtagagtt tttgtcatca gacaaggact ttgatcctgt cccctttggc atgcgggaag
 1680
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 1740
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 1800
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 1860
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 1920
 tacgcaagg gtgtgtggcc aggtgcaga gctgcgtgcc gtttgtgtcc gagcatcacg
 1980
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 2040
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 2100
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 2160
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 2220
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 2280
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<210> 3088

<211> 280

<212> PRT

<213> Homo sapiens

<400> 3088

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Lys	Lys	Arg	Lys	Arg	Glu	Arg	Glu	His	Cys	Asp	Thr	Glu	Gly	Glu	Ala
			20					25					30		
Asp	Asp	Phe	Asp	Pro	Gly	Lys	Lys	Val	Glu	Val	Glu	Pro	Pro	Pro	Asp
		35					40					45			
Arg	Pro	Val	Arg	Ala	Cys	Arg	Thr	Gln	Gln	Pro	Glu	Met	Glu	Arg	Thr
		50				55					60				
His	Ile	Gln	Gln	Leu	Leu	Glu	His	Phe	Leu	Arg	Gln	Leu	Gln	Arg	Lys
65				70					75					80	
Asp	Pro	His	Gly	Phe	Phe	Ala	Phe	Pro	Val	Thr	Asp	Ala	Ile	Ala	Pro
			85						90				95		
Gly	Tyr	Ser	Met	Ile	Ile	Lys	His	Pro	Met	Asp	Phe	Gly	Thr	Met	Lys
			100					105					110		
Asp	Lys	Ile	Val	Ala	Asn	Glu	Tyr	Lys	Ser	Val	Thr	Glu	Phe	Lys	Ala
		115					120						125		
Asp	Phe	Lys	Leu	Met	Cys	Asp	Asn	Ala	Met	Thr	Tyr	Asn	Arg	Pro	Asp

130	135	140	
Thr Val Tyr Tyr Lys Leu Ala Lys Lys Ile Leu His Ala Gly Phe Lys			
145	150	155	160
Met Met Ser Lys Gln Ala Ala Leu Leu Gly Asn Glu Asp Thr Ala Val			
	165	170	175
Glu Glu Pro Val Pro Glu Val Val Pro Val Gln Val Glu Thr Ala Lys			
	180	185	190
Lys Ser Lys Lys Pro Ser Arg Glu Val Ile Ser Cys Met Phe Glu Pro			
	195	200	205
Glu Gly Asn Ala Cys Ser Leu Thr Asp Ser Thr Ala Glu Glu His Val			
	210	215	220
Leu Ala Leu Val Glu His Ala Ala Asp Glu Ala Arg Asp Arg Ile Asn			
225	230	235	240
Arg Phe Leu Pro Gly Gly Lys Met Gly Tyr Leu Lys Arg Asn Gly Asp			
	245	250	255
Gly Ser Leu Leu Tyr Ser Val Val Asn Thr Ala Glu Pro Asn Ala Asp			
	260	265	270
Glu Glu Glu Thr His Pro Val Thr			
	275	280	

<210> 3089

<211> 722

<212> DNA

<213> Homo sapiens

<400> 3089

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120
gcccttacaa aggcggcaga ggggtggatta tcttcacctg aattttcaga gctctgtatt
180
tggtaggct ctcaaataaa atcattatgc aacttggaag aaagtatcac gtctgctggg
240
agagatgacc tagagagctt ccagcttgag ataagtgggt ttttaaaaga gatggcctgt
300
ccatactcgg tactcgtctc aggagacatt aaagagcgcc tcacaaagaa ggatgactgc
360
ttgaaacttc tgttgttttt aagtacagaa cttcaagctt tacaatatt acagaacaag
420
aaacataaaa attctcaatt agataaaaat agtgaagttt atcaggaagt tcaagctatg
480
tttgatacac ttggtatacc caagtcaaca acttctgaca ttccgcatat gctaaaccaa
540
gtggaatcaa aggtgaaaga tattctctca aaggtccaga aaaatcatgt gggaaaacca
600
ctactgaaaa tggatttaaa ttcagaacag gcggaacaac tggaaagaat caatgatgct
660
ctttcctgtg aatatgagtg ccgccgacga atgttaatga aacgattaga tgtgactgta
720
ca
722

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<210> 3090

<211> 240
 <212> PRT
 <213> Homo sapiens

<400> 3090
 Xaa Ala Leu Asp Gln Ala Thr Met Arg Gly Pro Glu Leu Gly Pro Glu
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 Thr Ser Met Glu Gly Asp Val Leu Asp Thr Leu Glu Ala Leu Gly Tyr
 20 25 30
 Lys Gly Pro Leu Leu Glu Glu Gln Ala Leu Thr Lys Ala Ala Glu Gly
 35 40 45
 Gly Leu Ser Ser Pro Glu Phe Ser Glu Leu Cys Ile Trp Leu Gly Ser
 50 55 60
 Gln Ile Lys Ser Leu Cys Asn Leu Glu Glu Ser Ile Thr Ser Ala Gly
 65 70 75 80
 Arg Asp Asp Leu Glu Ser Phe Gln Leu Glu Ile Ser Gly Phe Leu Lys
 85 90 95
 Glu Met Ala Cys Pro Tyr Ser Val Leu Val Ser Gly Asp Ile Lys Glu
 100 105 110
 Arg Leu Thr Lys Lys Asp Asp Cys Leu Lys Leu Leu Phe Leu Ser
 115 120 125
 Thr Glu Leu Gln Ala Leu Gln Ile Leu Gln Asn Lys Lys His Lys Asn
 130 135 140
 Ser Gln Leu Asp Lys Asn Ser Glu Val Tyr Gln Glu Val Gln Ala Met
 145 150 155 160
 Phe Asp Thr Leu Gly Ile Pro Lys Ser Thr Thr Ser Asp Ile Pro His
 165 170 175
 Met Leu Asn Gln Val Glu Ser Lys Val Lys Asp Ile Leu Ser Lys Val
 180 185 190
 Gln Lys Asn His Val Gly Lys Pro Leu Leu Lys Met Asp Leu Asn Ser
 195 200 205
 Glu Gln Ala Glu Gln Leu Glu Arg Ile Asn Asp Ala Leu Ser Cys Glu
 210 215 220
 Tyr Glu Cys Arg Arg Arg Met Leu Met Lys Arg Leu Asp Val Thr Val
 225 230 235 240

<210> 3091
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 3091
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 120
 cccagggcga ccccttctgc caagtgtccc aaaatgattg cttaatgcct ggctccccc
 180
 ctctttgact ccattctctg gttccctctt tctgctgcca gctccccga ctcttccctg
 240
 gggactcctt tttgtgtccc ccttctcccc tgcccctact gccaggcaga tccccttttc
 300
 ttccataccc atccctgcct cctgctcgg ccg
 333

<210> 3092
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 3092
 Met Gly Met Glu Glu Lys Gly Ile Cys Leu Ala Val Gly Ala Gly Glu
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 Lys Gly Asp Thr Lys Arg Ser Pro Gln Gly Arg Val Gly Gly Ala Gly
 20 25 30
 Ser Arg Lys Arg Glu Pro Arg Asp Gly Val Lys Glu Trp Gly Ser Gln
 35 40 45
 Ala Phe Ser Asn His Phe Gly Thr Leu Gly Arg Arg Gly Arg Pro Gly
 50 55 60
 Gly Thr Lys Gly Leu Gly Cys Ser Leu Ser Val Pro Asp Pro Cys Gln
 65 70 75 80
 Ala Lys Met Val Trp Gln Arg Gly Glu Gln Leu Leu Pro Arg Ala Ser
 85 90 95
 Phe Pro Ser Ala Pro Phe Thr Arg
 100

<210> 3093
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 3093
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 120
 agggggcagc ctgtgggcag tgactctgtc tgtctttgga caggacaagg actgccatcc
 180
 accatggtga agctgggctg cagcttctct gggaagccag gtaaagaccc tggggaccag
 240
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 300
 ccgccactcc ctgaccaggt ggatcatcaag acacagacag aataccagct gtccctccca
 360
 gaccagcaga atttcctga cctggagggc cagaggctga actgcagcca cccagaggaa
 420
 gggcgaggc tgcccaccgc acggatgatc gccttcgcca tggcgctact gggctgcgtg
 480
 ctgatcatgt acaaggccat ctggtacgac cagttcacct gccccgacgg cttcctgctg
 540
 cggcacaaga tctgcacgcc gctgaccctg gagatgtact acacggagat ggaccccgag
 600
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 660
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 720

<210> 3094

<211> 179
 <212> PRT
 <213> Homo sapiens

<400> 3094

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Gly Asp Gln Asp Gly Ala Ala Met Asp Ser Val Pro Leu Ile Ser Pro
      20           25           30
Leu Asp Ile Ser Gln Leu Gln Pro Leu Pro Asp Gln Val Val Ile
      35           40           45
Lys Thr Gln Thr Glu Tyr Gln Leu Ser Ser Pro Asp Gln Gln Asn Phe
      50           55           60
Pro Asp Leu Glu Gly Gln Arg Leu Asn Cys Ser His Pro Glu Glu Gly
      65           70           75           80
Arg Arg Leu Pro Thr Ala Arg Met Ile Ala Phe Ala Met Ala Leu Leu
      85           90           95
Gly Cys Val Leu Ile Met Tyr Lys Ala Ile Trp Tyr Asp Gln Phe Thr
      100          105          110
Cys Pro Asp Gly Phe Leu Leu Arg His Lys Ile Cys Thr Pro Leu Thr
      115          120          125
Leu Glu Met Tyr Tyr Thr Glu Met Asp Pro Glu Arg His Arg Ser Ile
      130          135          140
Leu Ala Ala Ile Gly Ala Tyr Pro Leu Ser Arg Lys His Gly Thr Glu
      145          150          155          160
Thr Pro Ala Ala Trp Gly Asp Gly Tyr Arg Ala Ala Lys Glu Glu Arg
      165          170          175

Lys Gly Pro
  
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<210> 3095
 <211> 519
 <212> DNA
 <213> Homo sapiens

<400> 3095

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120
gggtttgacg aggtctttgt catcagcctg gctcgcaggc ctgaccgtcg ggaacgcatg
180
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240
atgctcaaca gcagtccat caggaacctc ggcgtagacc tgctcccggg ctaccaggac
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519
  
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<210> 3096
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 3096
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 20 25 30
 Pro Ser Lys Arg Pro Ser Lys Ile Gly Phe Asp Glu Val Phe Val Ile
 35 40 45
 Ser Leu Ala Arg Arg Pro Asp Arg Arg Glu Arg Met Leu Ala Ser Leu
 50 55 60
 Trp Glu Met Glu Ile Ser Gly Arg Val Val Asp Ala Val Asp Gly Trp
 65 70 75 80
 Met Leu Asn Ser Ser Ala Ile Arg Asn Leu Gly Val Asp Leu Leu Pro
 85 90 95
 Gly Tyr Gln Asp Pro Tyr Ser Gly Arg Thr Leu Thr Lys Gly Glu Val
 100 105 110
 Gly Cys Phe Leu Ser His Tyr Ser Ile Trp Glu Glu Arg Ala Val Gln
 115 120 125
 Gly Thr Leu Leu Ala Thr Gly Pro Gly Gly Leu Leu Arg Pro Ala Pro
 130 135 140
 Ala Arg Cys Pro Tyr Pro Leu Cys Arg Gly Arg Arg Val Ala Gln
 145 150 155

<210> 3097
 <211> 4953
 <212> DNA
 <213> Homo sapiens

<400> 3097
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 120
 ggcgggaggg gcggcctgag ggcggacggg cgggcgccc ggttgcggg gctcgggtgcc
 180
 gctccgcact gcccgccgg tctcgcccc ggcgccatga gtggcgccgg cggcggaggg
 240
 ggctcggcgc ccagtcgctt cgccgactac tttgtcatct gcggactgga cacggagacc
 300
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 360
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 420
 ttgagaagaa cattcaaate taaggtcctt gcacgatatc ctgagaacgt agaatggaat
 480
 ccctttgacc aagatgcagt aggaatgcta tgtatgccga aagggtggc attcaagacc
 540
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 600

eggacatttg ggtttgcctt cacattttat gaagagggtga ctagcaagca gatctgcagt
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720
gctgatgaca gagaccagag cagcatggag gatggtgaag acactcctgt gaccaaactg
780
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ctcatcacac ccatgtcttt catgaaggca tgtcggagcg tgccggggcca actccaccag
900
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Met Cys Asp Gly Arg Thr Pro Thr Pro Glu Glu Leu Pro Pro Cys Tyr
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Glu Gly Thr Asp Trp Ser Gly Cys Thr Leu Gln Glu Phe Met Asp Cys
225          230          235          240
Pro Tyr Asn Leu Ala Asn Asn Arg Gln Val Arg Met Leu Ala Asp Leu
           245          250          255
Ser Leu Val Gly Cys Tyr Asn Leu Ser Phe Ile Pro Glu Gly Lys Arg
           260          265          270
Ala Gln Leu Leu Leu Glu Ser Ala Lys Lys Asn Leu Arg Gly Met Ala
           275          280          285
Phe Phe Gly Leu Thr Glu Phe Gln Arg Lys Thr Gln Tyr Leu Phe Glu
           290          295          300
Arg Thr Phe Asn Leu Lys Phe Ile Arg Pro Phe Met Gln Tyr Asn Ser
305          310          315          320
Thr Arg Ala Gly Gly Val Glu Val Asp Glu Asp Thr Ile Arg Arg Ile
           325          330          335
Glu Glu Leu Asn Asp Leu Asp Met Gln Leu Tyr Asp Tyr Ala Lys Asp
           340          345          350
Leu Phe Gln Gln Arg Tyr Gln Tyr Lys Arg Gln Leu Glu Arg Arg Glu
           355          360          365
Gln Arg Leu Arg Ser Arg Glu Glu Arg Leu Leu His Arg Ala Lys Glu

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Asp Tyr Met Ser His Ile	Glu Lys Trp	
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<210> 3103
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 <212> DNA
 <213> Homo sapiens

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 35 40 45
 Ala Ala Ala Trp Gln Arg Ala Ser Leu Gly Gln Trp Xaa Arg Arg Pro
 50 55 60
 Val Ala Ala Leu Ala Pro Tyr Ser Asp Ser Leu Val Glu Pro Leu Val
 65 70 75 80
 Cys Arg Leu Gln Val Leu Phe Leu Lys Lys Ala Gly Ser Glu Arg Pro
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 Cys Glu Thr Thr Pro Gly Ala Lys Gly Asp Ser His Lys Thr Gln Val
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<210> 3106

<211> 1366

<212> PRT

<213> Homo sapiens

<400> 3106

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Pro	Pro	Pro	Ala	Gly	Ser	Leu	Leu	Tyr	Ser	Pro	Pro	Pro	Leu	Gln	Ser
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Ala	Met	Leu	His	Cys	Pro	Tyr	Trp	Asn	Thr	Phe	Ser	Leu	Pro	Pro	Tyr
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Pro	Ala	Phe	Ser	Ser	Asp	Ser	Arg	Pro	Phe	Met	Ser	Ser	Ala	Ser	Phe
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Leu	Gly	Ser	Gln	Pro	Cys	Pro	Asp	Thr	Ser	Tyr	Ala	Pro	Val	Ala	Thr
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Ala	Ser	Ser	Leu	Pro	Pro	Lys	Thr	Cys	Asp	Phe	Ala	Gln	Asp	Ser	Ser

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Tyr	Phe	Glu	Asp	Phe	Ser	Asn	Ile	Ser	Ile	Phe	Ser	Ser	Ser	Val	Asp														
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Ser	Leu	Ser	Asp	Ile	Val	Asp	Thr	Pro	Asp	Phe	Leu	Pro	Ala	Asp	Ser														
			115				120						125																
Leu	Asn	Gln	Val	Ser	Thr	Ile	Trp	Asp	Asp	Asn	Pro	Ala	Pro	Ser	Thr														
			130				135						140																
His	Asp	Lys	Leu	Phe	Gln	Leu	Ser	Arg	Pro	Phe	Ala	Gly	Phe	Glu	Asp														
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Phe	Leu	Pro	Ser	His	Ser	Thr	Pro	Leu	Leu	Val	Ser	Tyr	Gln	Glu	Gln														
			165			170			175																				
Ser	Val	Gln	Ser	Gln	Pro	Glu	Glu	Glu	Asp	Glu	Ala	Glu	Glu	Glu	Glu														
			180			185			190																				
Ala	Glu	Glu	Leu	Gly	His	Thr	Glu	Thr	Tyr	Ala	Asp	Tyr	Val	Pro	Ser														
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Pro	Ser	Asp	Ser	Gly	Ala	Leu	Ser	Ala	Leu	Gln	Leu	Glu	Ala	Ile	Thr														
			245			250			255																				
Tyr	Ala	Cys	Gln	Gln	His	Glu	Val	Leu	Leu	Pro	Ser	Gly	Gln	Arg	Ala														
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Gly	Phe	Leu	Ile	Gly	Asp	Gly	Ala	Gly	Val	Gly	Lys	Gly	Arg	Thr	Val														
			275			280			285																				
Ala	Gly	Val	Ile	Leu	Glu	Asn	His	Leu	Arg	Gly	Arg	Lys	Lys	Ala	Leu														
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Trp	Phe	Ser	Val	Ser	Asn	Asp	Leu	Lys	Tyr	Asp	Ala	Glu	Arg	Asp	Leu														
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Arg	Asp	Ile	Glu	Ala	Thr	Gly	Ile	Ala	Val	His	Ala	Leu	Ser	Lys	Ile														
			325			330			335																				
Lys	Tyr	Gly	Asp	Thr	Thr	Thr	Ser	Glu	Gly	Val	Leu	Phe	Ala	Thr	Tyr														
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Ser	Ala	Leu	Ile	Gly	Glu	Ser	Gln	Ala	Gly	Gly	Gln	His	Arg	Thr	Arg														
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Arg Glu Glu Leu Ala Arg Asp Lys Cys Val Val Ile Gly Leu Gln Ser		
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Thr Gly Glu Ala Arg Thr Arg Glu Val Leu Gly Glu Asn Asp Gly His		
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Leu Asn Cys Phe Val Ser Ala Ala Glu Gly Val Phe Leu Ser Leu Ile		
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Gln Lys His Phe Pro Ser Thr Lys Arg Lys Arg Asp Arg Gly Ala Gly		
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Ser Lys Arg Lys Arg Arg Pro Arg Gly Arg Gly Ala Lys Ala Pro Arg		
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Leu Ala Cys Glu Thr Ala Gly Val Ile Arg Ile Ser Asp Asp Ser Ser		
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Thr Glu Ser Asp Pro Gly Leu Asp Ser Asp Phe Asn Ser Ser Pro Glu		
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Ser Leu Val Asp Asp Asp Val Val Ile Val Asp Ala Val Gly Leu Pro		
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Ser Asp Asp Arg Gly Ser Leu Cys Leu Leu Gln Arg Asp Pro His Gly		
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Pro Gly Val Leu Glu Arg Val Glu Arg Leu Lys Gln Asp Leu Leu Asp		
705	710	715
Lys Val Arg Arg Leu Gly Arg Glu Leu Pro Val Asn Thr Leu Asp Glu		
725	730	735
Leu Ile Asp Gln Leu Gly Gly Pro Gln Arg Val Ala Glu Met Thr Gly		
740	745	750
Arg Lys Gly Arg Val Val Ser Arg Pro Asp Gly Thr Val Ala Phe Glu		
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Ser Arg Ala Glu Gln Gly Leu Ser Ile Asp His Val Asn Leu Arg Glu		
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Lys Gln Arg Phe Met Ser Gly Glu Lys Leu Val Ala Ile Ile Ser Glu		
785	790	795
Ala Ser Ser Ser Gly Val Ser Leu Gln Ala Asp Arg Arg Val Gln Asn		
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Gln Arg Arg Arg Val His Met Thr Leu Glu Leu Pro Trp Ser Ala Asp		
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Arg Ala Ile Gln Gln Phe Gly Arg Thr His Arg Ser Asn Gln Val Ser		
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Ala Pro Glu Tyr Val Phe Leu Ile Ser Glu Leu Ala Gly Glu Arg Arg		
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Phe Ala Ser Ile Val Ala Lys Arg Leu Glu Ser Leu Gly Ala Leu Thr		
865	870	875
His Gly Asp Arg Arg Ala Thr Glu Ser Arg Asp Leu Ser Lys Tyr Asn		
885	890	895
Phe Glu Asn Lys Tyr Gly Thr Arg Ala Leu His Cys Val Leu Thr Thr		
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Ile Leu Ser Gln Thr Glu Asn Lys Val Pro Val Pro Gln Gly Tyr Pro		
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Gly Gly Val Pro Thr Phe Phe Arg Asp Met Lys Gln Gly Leu Leu Ser		
930	935	940
Val Gly Ile Gly Gly Arg Glu Ser Arg Asn Gly Cys Leu Asp Val Glu		

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Lys Asp Cys Ser Ile Thr Lys Phe Leu Asn Arg Ile Leu Gly Leu Glu						
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Val His Lys Gln Asn Ala Leu Phe Gln Tyr Phe Ser Asp Thr Phe Asp						
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His Leu Ile Glu Met Asp Lys Arg Glu Gly Lys Tyr Asp Met Gly Ile						
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Leu Asp Leu Ala Pro Gly Ile Glu Glu Ile Tyr Glu Glu Ser Gln Gln						
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Val Phe Leu Ala Pro Gly His Pro Gln Asp Gly Gln Val Val Phe Tyr						
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Lys Ile Ser Val Asp Arg Gly Leu Lys Trp Glu Asp Ala Phe Ala Lys						
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Val Arg Gly Asn Lys Pro Ser Cys Leu Leu Ala Glu Gln Asn Arg Gly						
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Gln Phe Phe Thr Val Tyr Lys Pro Asn Ile Gly Arg Gln Ser Gln Leu						
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Glu Ala Leu Asp Ser Leu Arg Arg Lys Phe His Arg Val Thr Ala Glu						
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Glu Ala Lys Glu Pro Trp Glu Ser Gly Tyr Ala Leu Ser Leu Thr His						
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Cys Ser His Ser Ala Trp Asn Arg His Cys Arg Leu Ala Gln Glu Gly						
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Lys Asp Cys Leu Gln Gly Leu Arg Leu Arg His His Tyr Met Leu Cys						
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Gly Ala Leu Leu Arg Val Trp Gly Arg Ile Ala Ala Val Met Ala Asp						
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Val Leu Gln Glu Leu Arg Leu Met Asp Ala Asp Val Lys Arg Arg Gln						
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Gln Ala Asp Pro Ala Ala Leu Ala His Gln Gly Cys Asp Ile Asn Phe						
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Lys Glu Val Leu Glu Asp Met Leu Arg Ser Leu His Ala Gly Pro Pro						
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<213> Homo sapiens

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 1980
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 gt
 2102

<210> 3108

<211> 517

<212> PRT

<213> Homo sapiens

<400> 3108

Met	Leu	Gln	Glu	Trp	Leu	Ala	Ala	Val	Gly	Asp	Asp	Tyr	Ala	Ala	Val
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Val	Trp	Arg	Pro	Glu	Gly	Glu	Pro	Arg	Phe	Tyr	Pro	Asp	Glu	Glu	Gly
			20					25				30			
Pro	Lys	His	Trp	Thr	Lys	Glu	Arg	His	Gln	Phe	Leu	Met	Glu	Leu	Lys
		35				40					45				
Gln	Glu	Ala	Leu	Thr	Phe	Ala	Arg	Asn	Trp	Gly	Ala	Asp	Tyr	Ile	Leu
	50				55					60					
Phe	Ala	Asp	Thr	Asp	Asn	Ile	Leu	Thr	Asn	Asn	Gln	Thr	Leu	Arg	Leu
65				70				75					80		
Leu	Met	Gly	Gln	Gly	Leu	Pro	Val	Val	Ala	Pro	Met	Leu	Asp	Ser	Gln
		85				90					95				
Thr	Tyr	Tyr	Ser	Asn	Phe	Trp	Cys	Gly	Ile	Thr	Pro	Gln	Gly	Tyr	Tyr
		100				105					110				
Arg	Arg	Thr	Ala	Glu	Tyr	Phe	Pro	Thr	Lys	Asn	Arg	Gln	Arg	Arg	Gly
	115					120					125				
Cys	Phe	Arg	Val	Pro	Met	Val	His	Ser	Thr	Phe	Leu	Ala	Ser	Leu	Arg
	130					135					140				
Ala	Glu	Gly	Ala	Asp	Gln	Leu	Ala	Phe	Tyr	Pro	Pro	His	Pro	Asn	Tyr
145				150					155					160	
Thr	Trp	Pro	Phe	Asp	Asp	Ile	Ile	Val	Phe	Ala	Tyr	Ala	Cys	Gln	Ala
			165					170					175		
Ala	Gly	Val	Ser	Val	His	Val	Cys	Asn	Glu	His	Arg	Tyr	Gly	Tyr	Met

	180		185		190
Asn Val Pro Val Lys Ser His Gln Gly Leu Glu Asp Glu Arg Val Asn					
195		200		205	
Phe Ile His Leu Ile Leu Glu Ala Leu Val Asp Gly Pro Arg Met Gln					
210		215		220	
Ala Ser Ala His Val Thr Arg Pro Ser Lys Arg Pro Ser Lys Ile Gly					
225		230		235	240
Phe Asp Glu Val Phe Val Ile Ser Leu Ala Arg Arg Pro Asp Arg Arg					
	245		250		255
Glu Arg Met Leu Ala Ser Leu Trp Glu Met Glu Ile Ser Gly Arg Val					
	260		265		270
Val Asp Ala Val Asp Gly Trp Met Leu Asn Ser Ser Ala Ile Arg Asn					
	275		280		285
Leu Gly Val Asp Leu Leu Pro Gly Tyr Gln Asp Pro Tyr Ser Gly Arg					
	290		295		300
Thr Leu Thr Lys Gly Glu Val Gly Cys Phe Leu Ser His Tyr Ser Ile					
305		310		315	320
Trp Glu Glu Val Val Ala Arg Gly Leu Ala Arg Val Leu Val Phe Glu					
	325		330		335
Asp Asp Val Arg Phe Glu Ser Asn Phe Arg Gly Arg Leu Glu Arg Leu					
	340		345		350
Met Glu Asp Val Glu Ala Glu Lys Leu Ser Trp Asp Leu Ile Tyr Leu					
	355		360		365
Gly Arg Lys Gln Val Asn Pro Glu Lys Glu Thr Ala Val Glu Gly Leu					
	370		375		380
Pro Gly Leu Val Val Ala Gly Tyr Ser Tyr Trp Thr Leu Ala Tyr Ala					
385		390		395	400
Leu Arg Leu Ala Gly Ala Arg Lys Leu Leu Ala Ser Gln Pro Leu Arg					
	405		410		415
Arg Met Leu Pro Val Asp Glu Phe Leu Pro Ile Met Phe Asp Gln His					
	420		425		430
Pro Asn Glu Gln Tyr Lys Ala His Phe Trp Pro Arg Asp Leu Val Ala					
	435		440		445
Phe Ser Ala Gln Pro Leu Leu Ala Ala Pro Thr His Tyr Ala Gly Asp					
	450		455		460
Ala Glu Trp Leu Ser Asp Thr Glu Thr Ser Ser Pro Trp Asp Asp Asp					
465		470		475	480
Ser Gly Arg Leu Ile Ser Trp Ser Gly Ser Gln Lys Thr Leu Arg Ser					
	485		490		495
Pro Arg Leu Asp Leu Thr Gly Ser Ser Gly His Ser Leu Gln Pro Gln					
	500		505		510
Pro Arg Asp Glu Leu					
515					

<210> 3109

<211> 959

<212> DNA

<213> Homo sapiens

<400> 3109

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120

cctggaatct ggaaggatct acttcactcg atccctccac agtcagcagg acaactttat
 180
 tccagtctgg gggacgcctt acccgagga gctgccaatc actgcagacg aagatgctca
 240
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 300
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 480
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 660
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 840
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 959

<210> 3110

<211> 207

<212> PRT

<213> Homo sapiens

<400> 3110

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Trp	His	Cys	Lys	Ile	Asp	Glu	Gly	Ser	Ala	Gly	Leu	Val	Ala	Ser	Cys
			20					25					30		
Trp	Ser	Pro	Asp	Gly	Arg	His	Ile	Leu	Asn	Thr	Thr	Glu	Phe	His	Leu
			35				40					45			
Arg	Ile	Thr	Val	Trp	Ser	Leu	Cys	Thr	Lys	Ser	Val	Ser	Tyr	Ile	Lys
	50					55				60					
Tyr	Pro	Lys	Ala	Cys	Leu	Gln	Gly	Ile	Thr	Phe	Thr	Arg	Asp	Gly	Arg
65				70			75							80	
Tyr	Met	Ala	Leu	Ala	Glu	Arg	Arg	Asp	Cys	Lys	Asp	Tyr	Val	Ser	Ile
			85					90					95		
Phe	Val	Cys	Ser	Asp	Trp	Gln	Leu	Leu	Arg	His	Phe	Asp	Thr	Asp	Thr
			100				105						110		
Gln	Asp	Leu	Thr	Gly	Ile	Glu	Trp	Ala	Pro	Asn	Gly	Cys	Val	Leu	Ala
	115					120					125				
Val	Trp	Asp	Thr	Cys	Leu	Glu	Tyr	Lys	Ile	Leu	Leu	Tyr	Ser	Leu	Asp
	130					135					140				
Gly	Arg	Leu	Leu	Ser	Thr	Tyr	Ser	Ala	Xaa	Arg	Val	Val	Xaa	Leu	Gly

145		150		155		160
Ile	Lys	Ser	Val	Ala	Trp	Gly
		165		170		175
Ser	Tyr	Asp	Gly	Lys	Val	Arg
		180		185		190
Ile	Thr	Glu	Phe	Gly	His	Pro
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<210> 3111
 <211> 1269
 <212> DNA
 <213> Homo sapiens

<400> 3111
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 120
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 180
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 240
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 300
 tccatccaga gactgaaacc gtttctatcc ggtcagtggc aaaactgttg aaagggcaat
 360
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 420
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 480
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 540
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 600
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 660
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 720
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 780
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 1020
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 1140
 cccgtgtcc tggctccctt tcttccctct gtcttggcca ggtcctttcc cccatctctg
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 1260
 gtcattccac
 1269

<210> 3112
 <211> 151
 <212> PRT
 <213> Homo sapiens

<400> 3112
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 20 25 30
 Glu Gly Arg Arg Gly Ala Arg Thr Ala Gly Leu Arg Gly Arg Pro Trp
 35 40 45
 Arg Asp Trp Glu Glu Arg Arg Gly Val Thr Thr Val Gln His Pro Glu
 50 55 60
 Lys Ser Asp Trp Gln Thr Arg Thr Gly Gln Pro Cys Ser Cys Met Ile
 65 70 75 80
 Gln Glu Leu Ala Ser Glu Arg Glu Ser Val Ala Glu Ala Gly Gly Ser
 85 90 95
 Ala Arg Gln Lys Val Arg Gly Leu Val Leu Arg Arg Gly Lys Arg Gln
 100 105 110
 Ser Glu Ser Leu His Ala Pro Gly Leu His Gly Arg Ala Arg Ala Ser
 115 120 125
 Gln Lys Arg Val Asn Asp Pro Glu Cys Asp Trp Glu Gly Glu Leu Ile
 130 135 140
 Pro Tyr Gln Glu Thr Gly Ser
 145 150

<210> 3113
 <211> 631
 <212> DNA
 <213> Homo sapiens

<400> 3113
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 120
 ccaaaaggga aggagatagt aagcctgctg gaaagaaaca tcaccgtgac aatgtacatc
 180
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 240
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 300
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 360
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 420
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 480

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 631

<210> 3114
 <211> 210
 <212> PRT
 <213> Homo sapiens

<400> 3114
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 20 25 30
 Ile Val Ala Ile Met Ile Pro Glu Pro Lys Gly Lys Glu Ile Val Ser
 35 40 45
 Leu Leu Glu Arg Asn Ile Thr Val Thr Met Tyr Ile Thr Ile Gly Thr
 50 55 60
 Arg Asn Leu Gln Lys Tyr Val Ser Arg Thr Ser Val Val Phe Val Ser
 65 70 75 80
 Ile Ser Phe Ile Val Leu Met Ile Ile Ser Leu Ala Trp Leu Val Phe
 85 90 95
 Tyr Tyr Ile Gln Arg Phe Arg Tyr Ala Asn Ala Arg Asp Arg Asn Gln
 100 105 110
 Arg Arg Leu Gly Asp Ala Ala Lys Lys Ala Ile Ser Lys Leu Gln Ile
 115 120 125
 Arg Thr Ile Lys Lys Gly Asp Lys Glu Thr Glu Ser Asp Phe Asp Asn
 130 135 140
 Cys Ala Val Cys Ile Glu Gly Tyr Lys Pro Asn Asp Val Val Arg Ile
 145 150 155 160
 Leu Pro Cys Arg His Leu Phe His Lys Ser Cys Val Asp Pro Trp Leu
 165 170 175
 Leu Asp His Arg Thr Cys Pro Met Cys Lys Met Asn Ile Leu Lys Ala
 180 185 190
 Leu Gly Ile Pro Pro Asn Ala Asp Cys Met Asp Asp Phe Ala Thr Asp
 195 200 205
 Phe Glu
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<210> 3115
 <211> 1366
 <212> DNA
 <213> Homo sapiens

<400> 3115
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 120
 gcagaaaaga tggaaaaaag gacatgtgca ctctgccccca aagatgtcga atataatgtc
 180

ctatactttg cacaatcaga gaatatagct gctcatgaga attgtttgct gtattcttca
 240
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 300
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 360
 ggagccaccg tgggatgtga tttaaaaaac tgtaacaaga attaccactt tttctgtgcc
 420
 aagaaggacg acgcagttcc acagtctgat ggagttcgag gaatttataa actgctttgc
 480
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 540
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 600
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 660
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 720
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 780
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 960
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 1020
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 1320
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 1366

<210> 3116

<211> 191

<212> PRT

<213> Homo sapiens

<400> 3116

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Val	Leu	Tyr	Phe	Ala	Gln	Ser	Glu	Asn	Ile	Ala	Ala	His	Glu	Asn	Cys
			20					25					30		
Leu	Leu	Tyr	Ser	Ser	Gly	Leu	Val	Glu	Cys	Glu	Asp	Gln	Asp	Pro	Leu
			35				40					45			
Asn	Pro	Asp	Arg	Ser	Phe	Asp	Val	Glu	Ser	Val	Lys	Lys	Glu	Ile	Gln

50	55	60
Arg Gly Arg Lys Leu Lys Cys Lys Phe Cys His Lys Arg Gly Ala Thr		
65	70	75
Val Gly Cys Asp Leu Lys Asn Cys Asn Lys Asn Tyr His Phe Phe Cys		80
	85	90
Ala Lys Lys Asp Asp Ala Val Pro Gln Ser Asp Gly Val Arg Gly Ile		95
	100	105
Tyr Lys Leu Leu Cys Gln Gln His Ala Gln Phe Pro Ile Ile Ala Gln		110
	115	120
Ser Gly Lys Phe Ser Gly Val Lys Arg Lys Arg Gly Arg Lys Lys Pro		125
	130	135
Leu Ser Gly Asn His Val Gln Pro Pro Glu Thr Met Lys Cys Asn Thr		140
145	150	155
Phe Ile Arg Gln Val Lys Glu Glu His Gly Arg His Thr Asp Ala Thr		160
	165	170
Val Lys Val Pro Phe Leu Lys Lys Cys Lys Xaa Ser Arg Thr Ser		175
	180	185
		190

<210> 3117

<211> 1373

<212> DNA

<213> Homo sapiens

<400> 3117

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 180
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 240
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 300
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 420
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 480
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 540
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 600
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 660
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 720
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 780
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 1020
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 1080
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 1260
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 1373

<210> 3118

<211> 312

<212> PRT

<213> Homo sapiens

<400> 3118

Val	Thr	Leu	Ser	Pro	Lys	Asp	Cys	Gln	Val	Phe	Arg	Ser	Asp	His	Gly
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Ser	Ser	Ile	Ser	Cys	Gln	Pro	Pro	Ala	Glu	Ile	Pro	Gly	Tyr	Leu	Pro
			20					25					30		
Ala	Asp	Thr	Val	His	Leu	Ala	Val	Glu	Phe	Phe	Asn	Leu	Thr	His	Leu
			35				40					45			
Pro	Ala	Asn	Leu	Leu	Gln	Gly	Ala	Ser	Lys	Leu	Gln	Glu	Leu	His	Leu
			50			55					60				
Ser	Ser	Asn	Gly	Leu	Glu	Ser	Leu	Ser	Pro	Glu	Phe	Leu	Arg	Pro	Val
65				70					75				80		
Pro	Gln	Leu	Arg	Val	Leu	Asp	Leu	Thr	Arg	Asn	Ala	Leu	Thr	Gly	Leu
			85					90					95		
Pro	Pro	Gly	Leu	Phe	Gln	Ala	Ser	Ala	Thr	Leu	Asp	Thr	Leu	Val	Leu
			100					105					110		
Lys	Glu	Asn	Gln	Leu	Glu	Val	Leu	Glu	Val	Ser	Trp	Leu	His	Gly	Leu
			115			120						125			
Lys	Ala	Leu	Gly	His	Leu	Asp	Leu	Ser	Gly	Asn	Arg	Leu	Arg	Lys	Leu
			130			135					140				
Pro	Pro	Gly	Leu	Leu	Ala	Asn	Phe	Thr	Leu	Leu	Arg	Thr	Leu	Asp	Leu
145				150					155				160		
Gly	Glu	Asn	Gln	Leu	Glu	Thr	Leu	Pro	Pro	Asp	Leu	Leu	Arg	Gly	Pro
			165					170					175		
Leu	Gln	Leu	Glu	Arg	Leu	His	Leu	Glu	Gly	Asn	Lys	Leu	Gln	Val	Leu
			180					185					190		
Gly	Lys	Asp	Leu	Leu	Leu	Pro	Gln	Pro	Asp	Leu	Arg	Tyr	Leu	Phe	Leu
			195			200					205				
Ser	Gly	Asn	Lys	Leu	Ala	Arg	Val	Ala	Ala	Gly	Ala	Phe	Gln	Gly	Leu
			210			215					220				
Arg	Gln	Leu	Asp	Met	Leu	Asp	Leu	Ser	Asn	Asn	Ser	Leu	Ala	Ser	Val
225				230					235				240		
Pro	Glu	Gly	Leu	Trp	Ala	Ser	Leu	Gly	Gln	Pro	Asn	Trp	Asp	Met	Arg

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                245                250                255
Asp Gly Phe Asp Ile Ser Gly Asn Pro Trp Ile Cys Asp Gln Asn Leu
                260                265                270
Ser Asp Leu Tyr Arg Trp Leu Gln Ala Gln Lys Asp Lys Met Phe Ser
                275                280                285
Gln Asn Asp Thr Arg Cys Ala Gly Pro Glu Ala Val Lys Gly Gln Thr
                290                295                300
Leu Leu Ala Val Ala Lys Ser Gln
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<210> 3119

<211> 427

<212> DNA

<213> Homo sapiens

<400> 3119

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ttggggccga gtggcatgtc cctccacccc tgcaagctgc cctgcctctc accacctacc
240
tacaccacct tccaagccac cccaacgctc attcccacgg agacggcagc tctatacccc
300
tcttcagcac tgctccacgc tgccagggtg cctgctgccc ccaccctgt tgcttactat
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427

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<210> 3120

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3120

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Val His Met Val Leu Asn Gln Gln Gly Arg Pro Ser Gly Asp Ala Phe
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Ile Gln Met Thr Ser Ala Glu Arg Ala Leu Ala Ala Ala Gln Arg Cys
20          25          30
His Lys Lys Val Met Lys Glu Arg Tyr Val Glu Val Val Pro Cys Ser
35          40          45
Thr Glu Glu Met Ser Arg Val Leu Met Gly Gly Thr Leu Gly Arg Ser
50          55          60
Gly Met Ser Pro Pro Pro Cys Lys Leu Pro Cys Leu Ser Pro Pro Thr
65          70          75          80
Tyr Thr Thr Phe Gln Ala Thr Pro Thr Leu Ile Pro Thr Glu Thr Ala
85          90          95
Ala Leu Tyr Pro Ser Ser Ala Leu Leu Pro Ala Ala Arg Val Pro Ala
100         105         110
Ala Pro Thr Pro Val Ala Tyr Tyr Pro Gly Pro Ala Thr Gln Leu Tyr

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	115		120		125
Leu	Asn	Tyr	Thr	Ala	Tyr
		Tyr	Pro	Ser	Pro
			Glu	Asp	Asn
				Ala	
	130		135		140

<210> 3121
 <211> 284
 <212> DNA
 <213> Homo sapiens

<400> 3121
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 120
 taagaggaac atgaacctgg acggggcagc ttccattgtc cctctcctgc tcctgctaata
 180
 gaacaaggcc tcccagagt atgaagagaa catgcacaga taccagaagg cagccaagct
 240
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 284

<210> 3122
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 3122
 Met Ala Ala Gly Thr Ser Val Ser His Val Gly Ser Trp Ala Ala Pro
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 Gly Pro Ser Glu Asp Phe Ser Thr Ser Ala Ala Thr Ser Ala Ala Ser
 20 25 30
 Ser His Val Arg Arg Asn Lys Arg Asn Met Asn Leu Asp Gly Ala Ala
 35 40 45
 Ser Ile Val Pro Leu Leu Leu Leu Met Asn Lys Ala Ser Pro Glu
 50 55 60
 Tyr Glu Glu Asn Met His Arg Tyr Gln Lys Ala Ala Lys Leu Phe Arg
 65 70 75 80
 Gly Arg Phe Ser Leu Phe Trp Trp Thr Val Val
 85 90

<210> 3123
 <211> 344
 <212> DNA
 <213> Homo sapiens

<400> 3123
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 120
 gcagcccagg tgaccttcag aaagacattg gagaaggaag caaagggaga ggagcccagc
 180
 atgcagtcc ccaagttcaa acagaggaag ggggagtccg acggggccta tatccaccgc
 240

atgcagcaag aggccagca tgtgctgttc ctcagcaaga accaggccat ccggcagcca
 300
 gaggtgcagg cagctcccaa ggagaagtct gagcagaaaa aagc
 344

<210> 3124
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 3124
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 1 5 10 15
 Lys Lys Ala Ala Gln Val Thr Phe Arg Lys Thr Leu Glu Lys Glu Ala
 20 25 30
 Lys Gly Glu Glu Pro Asp Ile Ala Val Pro Lys Phe Lys Gln Arg Lys
 35 40 45
 Gly Glu Ser Asp Gly Ala Tyr Ile His Arg Met Gln Gln Glu Ala Gln
 50 55 60
 His Val Leu Phe Leu Ser Lys Asn Gln Ala Ile Arg Gln Pro Glu Val
 65 70 75 80
 Gln Ala Ala Pro Lys Glu Lys Ser Glu Gln Lys Lys
 85 90

<210> 3125
 <211> 647
 <212> DNA
 <213> Homo sapiens

<400> 3125
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 120
 ggtcagcagg cagtttagtt gtgggagtat ttccaatttg catgaatgaa acatggacaa
 180
 ataagataag gctggctcca gggaagtaat tccccagtt cccctgagcc ttggatctgg
 240
 aaaactgcag cccatcctgg aattagggaa catcacaaaa cgtactgggg agaactcccc
 300
 atgtggcctc ggcccacgcc agaagccggg caaggtccca agtgccggt cgcccacaag
 360
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 420
 aacccatctt cctgtgttct ctgccaaagag agctggagca aaagagatga gtttgagact
 480
 ctgattcatc catcaagaca aataaactca gtctatggag gttagcaggg caatttgtga
 540
 agcaaacaaa agttgagttt tggaaagggg ctctgaagaa aatgaagatg acataaccagg
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<210> 3126

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3126

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Met Lys Leu Asn Ser Trp Tyr Val Ile Phe Ile Phe Phe Arg Ala Pro
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Phe Gln Asn Ser Thr Phe Val Cys Phe Thr Asn Cys Pro Ala Asn Leu
          20             25             30
His Arg Leu Ser Leu Phe Val Leu Met Asp Glu Ser Glu Ser Gln Thr
      35             40             45
His Leu Phe Cys Ser Ser Ser Leu Gly Arg Glu His Arg Lys Met Gly
 50             55             60
Phe Ala Tyr Val Cys Val Trp Gly Gly Leu Phe Phe Leu Cys Phe Ser
65             70             75             80
Val Leu Ala Ile Ala Cys Gly Arg Ala Gly Thr Trp Asp Leu Ala Arg
          85             90             95
Leu Leu Ala Trp Ala Glu Ala Thr Trp Gly Val Leu Pro Ser Thr Phe
          100             105             110
Cys Asp Val Pro
          115

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<210> 3127

<211> 2218

<212> DNA

<213> Homo sapiens

<400> 3127

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120
acttttgaga aattgaagag cctagggctt tttgggctgc aagtcccaga agaatatggt
180
ggcctgggct tctccaacac catgtactca agactagggg agatcatcag catggatggg
240
tccatcactg tgaccctggc agcgcaccag gctattggcc tcaaggggat catcttggct
300
ggcactgagg agcagaaagc caaatacttg cctaaactgg cgtccgggga gcacatagca
360
gccttctgcc tcacggagcc agccagtggg agcgatgcag cctcaatccg gagcagagcc
420
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480
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600
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660
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720
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780

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900
gagagtatga cctacctcac agcagggatg ctggaccaac ctggctttcc cgactgctcc
960
atcgaggcag ccatggtgaa ggtgttcagc tccgaggccg cctggcagtg tgtgagtga
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1980
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2100
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2218

<210> 3128

<211> 565

<212> PRT

<213> Homo sapiens

<400> 3128

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 20 25 30
 Gln Glu Gly Lys Ile Pro Asp Glu Thr Leu Glu Lys Leu Lys Ser Leu
 35 40 45
 Gly Leu Phe Gly Leu Gln Val Pro Glu Glu Tyr Gly Gly Leu Gly Phe
 50 55 60
 Ser Asn Thr Met Tyr Ser Arg Leu Gly Glu Ile Ile Ser Met Asp Gly
 65 70 75 80
 Ser Ile Thr Val Thr Leu Ala Ala His Gln Ala Ile Gly Leu Lys Gly
 85 90 95
 Ile Ile Leu Ala Gly Thr Glu Glu Gln Lys Ala Lys Tyr Leu Pro Lys
 100 105 110
 Leu Ala Ser Gly Glu His Ile Ala Ala Phe Cys Leu Thr Glu Pro Ala
 115 120 125
 Ser Gly Ser Asp Ala Ala Ser Ile Arg Ser Arg Ala Thr Leu Ser Glu
 130 135 140
 Asp Lys Lys His Tyr Ile Leu Asn Gly Ser Lys Val Trp Ile Thr Asn
 145 150 155 160
 Gly Gly Leu Ala Asn Ile Phe Thr Val Phe Ala Lys Thr Glu Val Val
 165 170 175
 Asp Ser Asp Gly Ser Val Lys Asp Lys Ile Thr Ala Phe Ile Val Glu
 180 185 190
 Arg Asp Phe Gly Gly Val Thr Asn Gly Lys Pro Glu Asp Lys Leu Gly
 195 200 205
 Ile Arg Gly Ser Asn Thr Cys Glu Val His Phe Glu Asn Thr Lys Ile
 210 215 220
 Pro Val Glu Asn Ile Leu Gly Glu Val Gly Asp Gly Phe Lys Val Ala
 225 230 235 240
 Met Asn Ile Leu Asn Ser Gly Arg Phe Ser Met Gly Ser Val Val Ala
 245 250 255
 Gly Leu Leu Lys Arg Leu Ile Glu Met Thr Ala Glu Tyr Ala Cys Thr
 260 265 270
 Arg Lys Gln Phe Asn Lys Arg Leu Ser Glu Phe Gly Leu Ile Gln Glu
 275 280 285
 Lys Phe Ala Leu Met Ala Gln Lys Ala Tyr Val Met Glu Ser Met Thr
 290 295 300
 Tyr Leu Thr Ala Gly Met Leu Asp Gln Pro Gly Phe Pro Asp Cys Ser
 305 310 315 320
 Ile Glu Ala Ala Met Val Lys Val Phe Ser Ser Glu Ala Ala Trp Gln
 325 330 335
 Cys Val Ser Glu Ala Leu Gln Ile Leu Gly Gly Leu Gly Tyr Thr Arg
 340 345 350
 Asp Tyr Pro Tyr Glu Arg Ile Leu Arg Asp Thr Arg Ile Leu Leu Ile
 355 360 365
 Phe Glu Gly Thr Asn Glu Ile Leu Arg Met Tyr Ile Ala Leu Thr Gly
 370 375 380
 Leu Gln His Ala Gly Arg Ile Leu Thr Thr Arg Ile His Glu Leu Lys
 385 390 395 400
 Gln Ala Lys Val Ser Thr Val Met Asp Thr Val Gly Arg Arg Leu Arg
 405 410 415
 Asp Ser Leu Gly Arg Thr Val Asp Leu Gly Leu Thr Gly Asn His Gly

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                420                425                430
Val Val His Pro Ser Leu Ala Asp Ser Ala Asn Lys Phe Glu Glu Asn
                435                440                445
Thr Tyr Cys Phe Gly Arg Thr Val Glu Thr Leu Leu Leu Arg Phe Gly
                450                455                460
Lys Thr Ile Met Glu Glu Gln Leu Val Leu Lys Arg Val Ala Asn Ile
465                470                475                480
Leu Ile Asn Leu Tyr Gly Met Thr Ala Val Leu Ser Arg Ala Ser Arg
                485                490                495
Ser Ile Arg Ile Gly Leu Arg Asn His Asp His Glu Val Leu Leu Ala
                500                505                510
Asn Thr Phe Cys Val Glu Ala Tyr Leu Gln Asn Leu Phe Ser Leu Ser
                515                520                525
Gln Leu Asp Lys Tyr Ala Pro Glu Asn Leu Asp Glu Gln Ile Lys Lys
530                535                540
Val Ser Gln Gln Ile Leu Glu Lys Arg Ala Tyr Ile Cys Ala His Pro
545                550                555                560
Leu Asp Arg Thr Cys
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<210> 3129

<211> 1964

<212> DNA

<213> Homo sapiens

<400> 3129

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720
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780
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840

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<210> 3130

<211> 273

<212> PRT

<213> Homo sapiens

<400> 3130

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 20 25 30
 Gly Pro Gly Ala Ala Gln Glu Pro Thr Trp Leu Thr Asp Val Pro Ala
 35 40 45
 Ala Met Glu Phe Ile Ala Ala Thr Glu Val Ala Val Ile Gly Phe Phe
 50 55 60
 Gln Asp Leu Glu Ile Pro Ala Val Pro Ile Leu His Ser Met Val Gln

65					70					75					80
Lys	Phe	Pro	Gly	Val	Ser	Phe	Gly	Ile	Ser	Thr	Asp	Ser	Glu	Val	Leu
				85					90					95	
Thr	His	Tyr	Asn	Ile	Thr	Gly	Asn	Thr	Ile	Cys	Leu	Phe	Arg	Leu	Val
			100					105					110		
Asp	Asn	Glu	Gln	Leu	Asn	Leu	Glu	Asp	Glu	Asp	Ile	Glu	Ser	Ile	Asp
		115					120					125			
Ala	Thr	Lys	Leu	Ser	Arg	Phe	Ile	Glu	Ile	Asn	Ser	Leu	His	Met	Val
		130				135					140				
Thr	Glu	Tyr	Asn	Pro	Val	Thr	Val	Ile	Gly	Leu	Phe	Asn	Ser	Val	Ile
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Gln	Ile	His	Leu	Leu	Leu	Ile	Met	Asn	Lys	Ala	Ser	Pro	Glu	Tyr	Glu
			165					170					175		
Glu	Asn	Met	His	Arg	Tyr	Gln	Lys	Ala	Ala	Lys	Leu	Phe	Gln	Gly	Lys
		180						185					190		
Ile	Leu	Phe	Ile	Leu	Val	Asp	Ser	Gly	Met	Lys	Glu	Asn	Gly	Lys	Val
	195					200						205			
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	210					215					220				
Tyr	Gln	Thr	Leu	Asp	Asp	Glu	Trp	Asp	Thr	Leu	Pro	Thr	Ala	Glu	Val
225				230					235					240	
Ser	Val	Glu	His	Val	Gln	Asn	Phe	Cys	Asp	Gly	Phe	Leu	Ser	Gly	Lys
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Leu	Leu	Lys	Glu	Asn	Arg	Glu	Ser	Lys	Arg	Lys	Thr	Pro	Lys	Val	Glu
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Leu

<210> 3131

<211> 1544

<212> DNA

<213> Homo sapiens

<400> 3131

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 120
 ctccgagctt agcaaagaag cgacttcaga agaagcgaat gcatgtgaaa tcgtctcaag
 180
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 360
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 420
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 720
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<211> 283

<212> PRT

<213> Homo sapiens

<400> 3132

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Arg Phe Ser Arg Pro Cys Glu Cys Leu Val Val Arg Val Ala Pro Asp
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Val Phe Pro Glu Ile Gly Asp Val Met Cys Asn Ser Val Asn Ala Gly
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Trp Asn His Asp Ser Thr His Val Ile Arg Phe Pro Leu Asn Gly Tyr
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Cys His Leu Asn Ser Val Gln Val Leu Glu Arg Leu Gln Gln Arg Gly
225              230              235              240
Phe Glu Ile Val Gly Ser Cys Gly Gly Gly Val Asp Ser Ser Gln Phe
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<211> 621

<212> DNA

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<400> 3133

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<210> 3134

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<213> Homo sapiens

<400> 3134

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		20						25					30		
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<211> 3166

<212> DNA

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<400> 3135

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<212> PRT

<213> Homo sapiens

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<210> 3138

<211> 977

<212> PRT

<213> Homo sapiens

<400> 3138

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 Leu Ser Met His His Gln Pro Asp Pro Ala Leu Thr Lys Glu Phe Asp

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Tyr	Leu	Pro	Pro	Val	Asp	Ser	Arg	Ser	Ser	Ser	Gly	Phe	Val	Gly	Leu	
		35					40					45				
Arg	Asn	Gly	Gly	Ala	Thr	Cys	Tyr	Met	Asn	Ala	Val	Phe	Gln	Gln	Leu	
	50					55					60					
Tyr	Met	Gln	Pro	Gly	Leu	Pro	Glu	Ser	Leu	Leu	Ser	Val	Asp	Asp	Asp	
65					70					75				80		
Thr	Asp	Asn	Pro	Asp	Asp	Ser	Val	Phe	Tyr	Gln	Val	Gln	Ser	Leu	Phe	
				85				90					95			
Gly	His	Leu	Met	Glu	Ser	Lys	Leu	Gln	Tyr	Tyr	Val	Pro	Glu	Asn	Phe	
			100					105					110			
Trp	Lys	Ile	Phe	Lys	Met	Trp	Asn	Lys	Glu	Leu	Tyr	Val	Arg	Glu	Gln	
		115					120						125			
Gln	Asp	Ala	Tyr	Glu	Phe	Phe	Thr	Ser	Leu	Ile	Asp	Gln	Met	Asp	Glu	
	130					135					140					
Tyr	Leu	Lys	Lys	Met	Gly	Arg	Asp	Gln	Ile	Phe	Lys	Asn	Thr	Phe	Gln	
145					150					155				160		
Gly	Ile	Tyr	Ser	Asp	Gln	Lys	Ile	Cys	Lys	Asp	Cys	Pro	His	Arg	Tyr	
			165					170					175			
Glu	Arg	Glu	Glu	Ala	Phe	Met	Ala	Leu	Asn	Leu	Gly	Val	Thr	Ser	Cys	
			180					185					190			
Gln	Ser	Leu	Glu	Ile	Ser	Leu	Asp	Gln	Phe	Val	Arg	Gly	Glu	Val	Leu	
		195					200					205				
Glu	Gly	Ser	Asn	Ala	Tyr	Tyr	Cys	Glu	Lys	Cys	Lys	Glu	Lys	Arg	Ile	
	210					215					220					
Thr	Val	Lys	Arg	Thr	Cys	Ile	Lys	Ser	Leu	Pro	Ser	Val	Leu	Val	Ile	
225					230					235				240		
His	Leu	Met	Arg	Phe	Gly	Phe	Asp	Trp	Glu	Ser	Gly	Arg	Ser	Ile	Lys	
			245					250					255			
Tyr	Asp	Glu	Gln	Ile	Arg	Phe	Pro	Trp	Met	Leu	Asn	Met	Glu	Pro	Tyr	
			260					265					270			
Thr	Val	Ser	Gly	Met	Ala	Arg	Gln	Asp	Ser	Ser	Ser	Glu	Val	Gly	Glu	
		275					280						285			
Asn	Gly	Arg	Ser	Val	Asp	Gln	Gly	Gly	Gly	Gly	Ser	Pro	Arg	Lys	Lys	
	290					295					300					
Val	Ala	Leu	Thr	Glu	Asn	Tyr	Glu	Leu	Val	Gly	Val	Ile	Val	His	Ser	
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Gly	Gln	Ala	His	Ala	Gly	His	Tyr	Tyr	Ser	Phe	Ile	Lys	Asp	Arg	Arg	
			325						330					335		
Gly	Cys	Gly	Lys	Gly	Lys	Trp	Tyr	Lys	Phe	Asn	Asp	Thr	Val	Ile	Glu	
			340					345					350			
Glu	Phe	Asp	Leu	Asn	Asp	Glu	Thr	Leu	Glu	Tyr	Glu	Cys	Phe	Gly	Gly	
		355					360					365				

450	455	460
Phe Val Glu Lys Met Pro Ala Arg Ile Tyr Gln Met Val Arg Asp Glu		
465	470	475
Asn Leu Lys Phe Met Lys Asn Arg Asp Val Tyr Ser Ser Asp Tyr Phe		480
	485	490
Ser Phe Val Leu Ser Leu Ala Ser Leu Asn Ala Thr Lys Leu Lys His		495
	500	505
Pro Tyr Tyr Pro Cys Met Ala Lys Val Ser Leu Gln Leu Ala Ile Gln		510
	515	520
Phe Leu Phe Gln Thr Tyr Leu Arg Thr Lys Lys Lys Leu Arg Val Asp		525
	530	535
Thr Glu Glu Trp Ile Ala Thr Ile Glu Ala Leu Leu Ser Lys Ser Phe		540
545	550	555
Asp Ala Cys Gln Trp Leu Val Glu Tyr Phe Ile Ser Ser Glu Gly Arg		560
565	570	575
Glu Leu Ile Lys Ile Phe Leu Leu Glu Cys Asn Val Arg Glu Val Arg		580
	585	590
Val Ala Val Ala Thr Ile Leu Glu Lys Thr Leu Asp Ser Ala Leu Phe		595
	600	605
Tyr Gln Asp Lys Leu Lys Ser Leu His Gln Leu Leu Glu Val Leu Leu		610
	615	620
Ala Leu Leu Asp Lys Asp Val Pro Glu Asn Cys Lys Asn Cys Ala Gln		625
	630	635
Tyr Phe Phe Leu Phe Asn Thr Phe Val Gln Lys Gln Gly Ile Arg Ala		640
	645	650
Gly Asp Leu Leu Arg His Ser Ala Leu Arg His Met Ile Ser Phe		655
	660	665
Leu Leu Gly Ala Ser Arg Gln Asn Asn Gln Ile Arg Arg Trp Ser Ser		670
	675	680
Ala Gln Ala Arg Glu Phe Gly Asn Leu His Asn Thr Val Ala Leu Leu		685
	690	695
Val Leu His Ser Asp Val Ser Ser Gln Arg Asn Val Ala Pro Gly Ile		700
705	710	715
Phe Lys Gln Arg Pro Ile Ser Ile Ala Pro Ser Ser Pro Leu Leu		720
	725	730
Pro Leu His Glu Glu Val Glu Ala Leu Phe Met Ser Glu Gly Lys		735
	740	745
Pro Tyr Leu Leu Glu Val Met Phe Ala Leu Arg Glu Leu Thr Gly Ser		750
	755	760
Leu Leu Ala Leu Ile Glu Met Val Val Tyr Cys Cys Phe Cys Asn Glu		765
	770	775
His Phe Ser Phe Thr Met Leu His Phe Ile Lys Asn Gln Leu Glu Thr		780
	785	790
Ala Pro Pro His Glu Leu Lys Asn Thr Phe Gln Leu Leu His Glu Ile		795
	805	810
Leu Val Ile Glu Asp Pro Ile Gln Ala Glu Arg Val Lys Phe Val Phe		815
	820	825
Glu Thr Glu Asn Gly Leu Leu Ala Leu Met His His Ser Asn His Val		830
	835	840
Asp Ser Ser Arg Cys Tyr Gln Cys Val Lys Phe Leu Val Thr Leu Ala		845
	850	855
Gln Lys Cys Pro Ala Ala Lys Glu Tyr Phe Lys Glu Asn Ser His His		860
	865	870
Trp Ser Trp Ala Val Gln Trp Leu Gln Lys Lys Met Ser Glu His Tyr		875
	880	

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<400> 3140
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Arg Gln Leu Thr Trp Pro Glu Gly Lys Val Leu Trp Tyr Asn Thr Val
      20             25             30
Leu Asn Lys Ser Ser Asn Trp Gly Thr Ser Pro Leu Leu Trp Tyr Phe
      35             40             45
Tyr Ser Ala Leu Pro Arg Gly Leu Gly Cys Ser Leu Leu Phe Ile Pro
      50             55             60
Leu Gly Leu Val Asp Arg Arg Thr His Ala Pro Thr Val Leu Ala Leu

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<210> 3141
<211> 1815
<212> DNA
<213> Homo sapiens
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2359

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 1320
 ctgtcgagga agtctcccta cctgccctcg gccaccggg tcagcgggct catgatggcc
 1380
 aaccacacca gcatctctc gctcttcgag agaacctgtc gccagtatga caagctgcgt
 1440
 aagcgggagg ccttcctgga gcagttccgc aaggaggaca tgttcaagga caactttgat
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 gagatggaca catccaggga gattgtgcag cagctcatcg atgagtacca tgcggccaca
 1560
 cggccagact acatctctg gggcaccag gagcagtga tccccagga cagggacct
 1620
 catctgcctt actggttggc ccaagccctg cctgactgac caccctca gagcacagat
 1680
 caggacctc acgcatctt ttctcatata catggactct ctgttggcct gcaaacacat
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 1800
 aaaaaaaaaa aaaaa
 1815

<210> 3142

<211> 451

<212> PRT

<213> Homo sapiens

<400> 3142

Met	Pro	Arg	Glu	Ile	Ile	Thr	Leu	Gln	Leu	Gly	Gln	Cys	Gly	Asn	Gln
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Ile	Gly	Phe	Glu	Phe	Trp	Lys	Gln	Leu	Cys	Ala	Glu	His	Gly	Ile	Ser
			20					25					30		
Pro	Glu	Gly	Ile	Val	Glu	Glu	Phe	Ala	Thr	Glu	Gly	Thr	Asp	Arg	Lys
		35					40					45			
Asp	Val	Phe	Phe	Tyr	Gln	Ala	Asp	Asp	Glu	His	Tyr	Ile	Pro	Arg	Ala
		50				55					60				
Val	Leu	Leu	Asp	Leu	Glu	Pro	Arg	Val	Ile	His	Ser	Ile	Leu	Asn	Ser
65					70					75				80	
Pro	Tyr	Ala	Lys	Leu	Tyr	Asn	Pro	Glu	Asn	Ile	Tyr	Leu	Ser	Glu	His
			85						90					95	
Gly	Gly	Gly	Ala	Gly	Asn	Asn	Trp	Ala	Ser	Gly	Phe	Ser	Gln	Gly	Glu
			100					105					110		
Lys	Ile	His	Glu	Asp	Ile	Phe	Asp	Ile	Ile	Asp	Arg	Glu	Ala	Asp	Gly
		115					120					125			
Ser	Asp	Ser	Leu	Glu	Gly	Phe	Val	Leu	Cys	His	Ser	Ile	Ala	Gly	Gly
		130				135					140				
Thr	Gly	Ser	Gly	Leu	Gly	Ser	Tyr	Leu	Leu	Glu	Arg	Leu	Asn	Asp	Arg
145				150						155				160	
Tyr	Pro	Lys	Lys	Leu	Val	Gln	Thr	Tyr	Ser	Val	Phe	Pro	Asn	Gln	Asp
			165						170					175	
Glu	Met	Ser	Asp	Val	Val	Val	Gln	Pro	Tyr	Asn	Ser	Leu	Leu	Thr	Leu
			180					185				190			
Lys	Arg	Leu	Thr	Gln	Asn	Ala	Asp	Cys	Val	Val	Val	Leu	Asp	Asn	Thr

195	200	205
Ala Leu Asn Arg Ile Ala Thr Asp Arg Leu His Ile Gln Asn Pro Ser		
210	215	220
Phe Ser Gln Ile Asn Gln Leu Val Ser Thr Ile Met Ser Ala Ser Thr		
225	230	235
Thr Thr Leu Arg Tyr Pro Gly Tyr Met Asn Asn Asp Leu Ile Gly Leu		
245	250	255
Ile Ala Ser Leu Ile Pro Thr Pro Arg Leu His Phe Leu Met Thr Gly		
260	265	270
Tyr Thr Pro Leu Thr Thr Asp Gln Ser Val Ala Ser Val Arg Lys Thr		
275	280	285
Thr Val Leu Asp Val Met Arg Arg Leu Leu Gln Pro Lys Asn Val Met		
290	295	300
Val Ser Thr Gly Arg Asp Arg Gln Thr Asn His Cys Tyr Ile Ala Ile		
305	310	315
Leu Asn Ile Ile Gln Gly Glu Val Asp Pro Thr Gln Val His Lys Ser		
325	330	335
Leu Gln Arg Ile Arg Glu Arg Lys Leu Ala Asn Phe Ile Pro Trp Gly		
340	345	350
Pro Ala Ser Ile Gln Val Ala Leu Ser Arg Lys Ser Pro Tyr Leu Pro		
355	360	365
Ser Ala His Arg Val Ser Gly Leu Met Met Ala Asn His Thr Ser Ile		
370	375	380
Ser Ser Leu Phe Glu Arg Thr Cys Arg Gln Tyr Asp Lys Leu Arg Lys		
385	390	395
Arg Glu Ala Phe Leu Glu Gln Phe Arg Lys Glu Asp Met Phe Lys Asp		
405	410	415
Asn Phe Asp Glu Met Asp Thr Ser Arg Glu Ile Val Gln Gln Leu Ile		
420	425	430
Asp Glu Tyr His Ala Ala Thr Arg Pro Asp Tyr Ile Ser Trp Gly Thr		
435	440	445
Gln Glu Gln		
450		

<210> 3143

<211> 356

<212> DNA

<213> Homo sapiens

<400> 3143

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120
caggcctgag ctcttggtg gtgggaaggg gaggctgctg gtccacagtg tgggggtgct
180
tcacggttaa ccaagccatc ccccatgctg ggcgtgagga actagcggaa ttgagagcct
240
cagaaaccca ggtgctgctg tgtgaggctg tcgcagccac gaagatgacc atgactgcaa
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356

<210> 3144

<211> 81
 <212> PRT
 <213> Homo sapiens

<400> 3144
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 20 25 30
 Ala Trp Leu Thr Val Lys His Pro His Thr Val Asp Gln Gln Pro Pro
 35 40 45
 Leu Pro Thr Ser Gln Glu Leu Arg Pro Ala Ala Gln Pro Lys Gln Gln
 50 55 60
 Pro His His Ser Gln Thr Pro Pro Gln Arg Val Cys Leu Arg Ala Pro
 65 70 75 80
 Ser

<210> 3145
 <211> 436
 <212> DNA
 <213> Homo sapiens

<400> 3145
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 atccgaagag cccgattacc agctgctcgg gagggccaag caggaccggg ggaggcca
 120
 ctccgaggag cccgctccac ctgccctcag gaggggtgtt aaaacggagg ttgccaccgt
 180
 ttacgcacct gccctcagt ccagggcccc cgagcctggt ttgtcagact ctgcagccgc
 240
 cagccagtgg tcaactctgcc cggcagatga cgagcggagg agagccacac atctcaacgg
 300
 gctccaggcg ccctcggaaa ctgccctggc ctgctcacc ccgatgcagt gcctgtcccc
 360
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 420
 tcccacagcg gttgct
 436

<210> 3146
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 3146
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 20 25 30
 Thr Pro Arg Ser Pro Leu His Leu Pro Ser Gly Gly Cys Leu Lys Arg
 35 40 45
 Arg Leu Pro Pro Phe Thr His Leu Pro Ser Val Pro Gly Pro Pro Ser

50 55 60
 Leu Val Cys Gln Thr Leu Gln Pro Pro Ala Ser Gly His Ser Ala Arg
 65 70 75 80
 Gln Met Thr Ser Gly Gly Glu Pro His Ile Ser Thr Gly Ser Arg Arg
 85 90 95
 Pro Arg Lys Leu Pro Trp Pro Ala His Pro Arg Cys Ser Ala Cys Pro
 100 105 110
 Pro Asn Val Val Ser Ser Arg Arg Arg Leu Thr Pro Arg Arg Gly Trp
 115 120 125
 Gly Thr Ser
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<210> 3147

<211> 3106

<212> DNA

<213> Homo sapiens

<400> 3147

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 120
 gccgagcgcg aggtgtcggg gccaccttc agctgggagg agattcagaa gcataacctg
 180
 cgcaccgaca ggtggctggg cattgaccgc aagggtttaca acatcaccaa atggtccatc
 240
 cagcaccggg ggggccagcg ggtcatcggg cactacgctg gagaagatgc aacggatgcc
 300
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 600
 caggcccaag ctggatggct gcaacatgat tatggccacc tgtctgtcta cagaaaaccc
 660
 aagtggaacc accttgtcca caaatcgtc attggccact taaagggtgc ctctgccaac
 720
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 780
 gatgtgaaca tgctgcacgt gtttgttctg gggaatggc agcccatcga gtacggcaag
 840
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 900
 ccgtgtctca tccccatgta ttccagtag cagatcatca tgaccatgat cgtccataag
 960
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 1020
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 1080

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1140
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1200
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 3106

<210> 3148

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3148

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			20				25				30				
Thr	Asp	Arg	Trp	Leu	Val	Ile	Asp	Arg	Lys	Val	Tyr	Asn	Ile	Thr	Lys
			35				40				45				
Trp	Ser	Ile	Gln	His	Pro	Gly	Gly	Gln	Arg	Val	Ile	Gly	His	Tyr	Ala
			50			55				60					
Gly	Glu	Asp	Ala	Thr	Asp	Ala	Phe	Arg	Ala	Phe	His	Pro	Asp	Leu	Glu
			65			70				75				80	
Phe	Val	Gly	Lys	Phe	Leu	Lys	Pro	Leu	Leu	Ile	Gly	Glu	Leu	Ala	Pro
			85					90					95		
Glu	Glu	Pro	Ser	Gln	Asp	His	Gly	Lys	Asn	Ser	Lys	Ile	Thr	Glu	Asp
			100					105					110		
Phe	Arg	Ala	Leu	Arg	Lys	Thr	Ala	Glu	Asp	Met	Asn	Leu	Phe	Lys	Thr
			115				120					125			
Asn	His	Val	Phe	Phe	Leu	Leu	Leu	Leu	Ala	His	Ile	Ile	Ala	Leu	Glu
			130			135					140				
Ser	Ile	Ala	Trp	Phe	Thr	Val	Phe	Tyr	Phe	Gly	Asn	Gly	Trp	Ile	Pro
			145			150				155				160	
Thr	Leu	Ile	Thr	Ala	Phe	Val	Leu	Ala	Thr	Ser	Gln	Ala	Gln	Ala	Gly
			165					170					175		
Trp	Leu	Gln	His	Asp	Tyr	Gly	His	Leu	Ser	Val	Tyr	Arg	Lys	Pro	Lys
			180				185						190		
Trp	Asn	His	Leu	Val	His	Lys	Phe	Val	Ile	Gly	His	Leu	Lys	Gly	Ala
			195				200					205			
Ser	Ala	Asn	Trp	Trp	Asn	His	Arg	His	Phe	Gln	His	His	Ala	Lys	Pro
			210			215				220					
Asn	Ile	Phe	His	Lys	Asp	Pro	Asp	Val	Asn	Met	Leu	His	Val	Phe	Val
			225			230				235				240	
Leu	Gly	Glu	Trp	Gln	Pro	Ile	Glu	Tyr	Gly	Lys	Lys	Lys	Leu	Lys	Tyr
			245					250					255		
Leu	Pro	Tyr	Asn	His	Gln	His	Glu	Tyr	Phe	Phe	Leu	Ile	Gly	Pro	Pro

	260		265		270										
Leu	Leu	Ile	Pro	Met	Tyr	Phe	Gln	Tyr	Gln	Ile	Ile	Met	Thr	Met	Ile
	275						280					285			
Val	His	Lys	Asn	Trp	Val	Asp	Leu	Ala	Trp	Ala	Val	Ser	Tyr	Tyr	Ile
	290					295					300				
Arg	Phe	Phe	Ile	Thr	Tyr	Ile	Pro	Phe	Tyr	Gly	Ile	Leu	Gly	Ala	Leu
305					310					315					320
Leu	Phe	Leu	Asn	Phe	Ile	Arg	Phe	Leu	Glu	Ser	His	Trp	Phe	Val	Trp
			325						330					335	
Val	Thr	Gln	Met	Asn	His	Ile	Val	Met	Glu	Ile	Asp	Gln	Glu	Ala	Tyr
		340						345					350		
Arg	Asp	Trp	Phe	Ser	Ser	Gln	Leu	Thr	Ala	Thr	Cys	Asn	Val	Glu	Gln
	355						360					365			
Ser	Phe	Phe	Asn	Asp	Trp	Phe	Ser	Gly	His	Leu	Asn	Phe	Gln	Ile	Glu
	370					375					380				
His	His	Leu	Phe	Pro	Thr	Met	Pro	Arg	His	Asn	Leu	His	Lys	Ile	Ala
385					390					395					400
Pro	Leu	Val	Lys	Ser	Leu	Cys	Ala	Lys	His	Gly	Ile	Glu	Tyr	Gln	Glu
			405					410						415	
Lys	Pro	Leu	Leu	Arg	Ala	Leu	Leu	Asp	Ile	Ile	Arg	Ser	Leu	Lys	Lys
		420						425					430		
Ser	Gly	Lys	Leu	Trp	Leu	Asp	Ala	Tyr	Leu	His	Lys				
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<210> 3149

<211> 1006

<212> DNA

<213> Homo sapiens

<400> 3149

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120
gctgcccact ccgcgtctga ggaggtgcgg gagctcgagg gcaagaccgg cttctcatcg
180
gatcagatcg agcagctcca tcggagattt aagcagctga gtggagatca gcctaccatt
240
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300
gttcgtgcct tcttcgacaa caggaacctg cgcaaggga ccaagtggcct ggctgatgag
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420
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660
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720

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 840
 ggccggacagc ctcttctcgc agcgccggta catagccaag gctcgtctgc gcaccttctg
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<210> 3150

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3150

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			20					25					30		
Ala	Pro	Ala	Ala	Gly	Thr	Met	Gly	Ala	Ala	His	Ser	Ala	Ser	Glu	Glu
			35				40					45			
Val	Arg	Glu	Leu	Glu	Gly	Lys	Thr	Gly	Phe	Ser	Ser	Asp	Gln	Ile	Glu
	50					55					60				
Gln	Leu	His	Arg	Arg	Phe	Lys	Gln	Leu	Ser	Gly	Asp	Gln	Pro	Thr	Ile
65					70					75				80	
Arg	Lys	Glu	Asn	Phe	Asn	Asn	Val	Pro	Asp	Leu	Glu	Leu	Asn	Pro	Ile
			85						90					95	
Arg	Ser	Lys	Ile	Val	Arg	Ala	Phe	Phe	Asp	Asn	Arg	Asn	Leu	Arg	Lys
			100					105					110		
Gly	Pro	Ser	Gly	Leu	Ala	Asp	Glu	Ile	Asn	Phe	Glu	Asp	Phe	Leu	Thr
			115				120					125			
Ile	Met	Ser	Tyr	Phe	Arg	Pro	Ile	Asp	Thr	Thr	Met	Asp	Glu	Glu	Gln
	130					135					140				
Val	Glu	Leu	Ser	Arg	Lys	Glu	Lys	Leu	Arg	Phe	Leu	Phe	His	Met	Tyr
145					150					155				160	
Asp	Ser	Asp	Ser	Asp	Gly	Arg	Ile	Thr	Leu	Glu	Glu	Tyr	Arg	Asn	Val
			165					170						175	
Lys	Trp	Ser	Arg	Ser	Cys	Cys	Arg	Glu	Thr	Leu	Thr	Ser	Arg	Arg	Ser
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Pro	Leu	Ala	Pro	Ser	Pro	Thr	Gly	Pro							
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<210> 3151

<211> 2079

<212> DNA

<213> Homo sapiens

<400> 3151

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 120

cctgggcctc tcggtggagc agggacccga accggtgccc atccagtcgc gtgccatctg
180
aagccccctt ccagaaaaat gagccacaga gcaagctgac ccagcgcaca cagcccccca
240
gccctactat atttccgttc ctatcaaaaa atggatgact cggagacagg tttcaatctg
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360
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420
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480
ccgcagagcg agcactaccg cagcctgcag gccatggtgg ccacagagct gagcaaccgg
540
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660
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 1920
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 1980
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 2040
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 2079

<210> 3152
 <211> 214
 <212> PRT
 <213> Homo sapiens

<400> 3152
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 Phe Lys Gln Cys Leu Asp Glu Lys Glu Glu Val Leu Leu Asp Pro Tyr
 20 25 30
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 35 40 45
 Ile Phe Ser Phe Ile Ser Lys Asp Val Val Ser Lys Leu Arg Ile Met
 50 55 60
 Glu Arg Leu Arg Gly Gly Pro Gln Ser Glu His Tyr Arg Ser Leu Gln
 65 70 75 80
 Ala Met Val Ala His Glu Leu Ser Asn Arg Leu Val Asp Leu Glu Gly
 85 90 95
 Arg Ser His His Pro Glu Ser Gly Cys Arg Thr Val Leu Arg Leu His
 100 105 110
 Arg Ala Leu His Trp Leu Gln Leu Phe Leu Glu Gly Leu Arg Thr Ser
 115 120 125
 Pro Glu Asp Ala Arg Thr Ser Ala Leu Cys Ala Asp Ser Tyr Asn Ala
 130 135 140
 Ser Leu Ala Ala Tyr His Pro Trp Val Val Arg Arg Ala Val Thr Val
 145 150 155 160
 Ala Phe Cys Thr Leu Pro Thr Arg Glu Val Phe Leu Glu Ala Met Asn
 165 170 175
 Val Gly Pro Pro Glu Gln Ala Val Gln Met Leu Gly Glu Ala Leu Pro
 180 185 190
 Phe Ile Gln Arg Val Tyr Asn Val Ser Gln Lys Leu Tyr Ala Glu His
 195 200 205
 Ser Leu Leu Asp Leu Pro
 210

<210> 3153
 <211> 1498
 <212> DNA
 <213> Homo sapiens

<400> 3153

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gccaccaggg agcgccccgc gcgcggtcca cgtggcagag gtcgcggcct cgcgcgcg
240
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420
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600
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720
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1380
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<210> 3154

<211> 65

<212> PRT

<213> Homo sapiens

<400> 3154

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Cys Pro Gly Ala Gly Ile Ala Ser Arg Arg Pro Arg Gln Gln Gly Asp
          20          25          30
Ser Gly His Arg Trp Gly Ile Thr Leu Pro Thr Arg Asp Ser Arg His
          35          40          45
Gly Leu Leu Gly Leu Gln Ala Pro Trp Gly Ser Arg Gly Lys Pro Gln
 50          55          60
Gly
65

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<210> 3155

<211> 551

<212> DNA

<213> Homo sapiens

<400> 3155

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120
actaactgtg actcttcttc agaaggactg gaaaaggaca cagcaacaca gagaagtgc
180
cagacttgcc tagaaccatc atgttcatgt tcttctgaaa atcaggaatg ccagactgct
240
gccagccctg gggaaattct ggaaattttg aagaaaggga aggcatttgt tttagatatt
300
gacttggatt ttttttcagt caagaatccc ttcaaaaaaa tgttcactca ggaagagtac
360
aaaatcttac aagagctgta ccaatttaag aaacctggca ccaacctaac agaggaagat
420
ttggtagata ttgttgatac tcgaattcat caattagagg atttagaagc cactttcgct
480
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551

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<210> 3156

<211> 178

<212> PRT

<213> Homo sapiens

<400> 3156

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Met Val Lys Pro Tyr Lys Leu Cys Asn Asn Gln Glu Glu Asn Asp Ala
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Val Ser Ser Ala Lys Lys Pro Lys Leu Ala Leu Glu Asp Ser Glu Asn
          20          25          30
Thr Ala Ser Thr Asn Cys Asp Ser Ser Ser Glu Gly Leu Glu Lys Asp
          35          40          45
Thr Ala Thr Gln Arg Ser Asp Gln Thr Cys Leu Glu Pro Ser Cys Ser

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50		55		60
Cys Ser Ser Glu Asn Gln Glu Cys Gln Thr Ala Ala Ser Pro Gly Glu				
65		70		80
Ile Leu Glu Ile Leu Lys Lys Gly Lys Ala Phe Val Leu Asp Ile Asp				
	85		90	95
Leu Asp Phe Phe Ser Val Lys Asn Pro Phe Lys Lys Met Phe Thr Gln				
	100		105	110
Glu Glu Tyr Lys Ile Leu Gln Glu Leu Tyr Gln Phe Lys Lys Pro Gly				
	115		120	125
Thr Asn Leu Thr Glu Glu Asp Leu Val Asp Ile Val Asp Thr Arg Ile				
	130		135	140
His Gln Leu Glu Asp Leu Glu Ala Thr Phe Ala Asp Leu Cys Asp Gly				
145		150		160
Asp Asp Glu Glu Thr Val Gln Gly Trp Ala Ser Asn Pro Gly Met Glu				
	165		170	175
Ser Leu				

<210> 3157

<211> 903

<212> DNA

<213> Homo sapiens

<400> 3157

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720
gaacaggacc ccacggacga ggatccctgc cgggggtgtg gccctgctct ggtcaccacc
780
cgctggcgct ccccagggg ccggagccgg ggccgcccc gactggggg cgggggtggtt
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900

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<210> 3158
<211> 92
<212> PRT
<213> Homo sapiens

<400> 3158
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Val Leu Ser Glu Lys Met Glu Pro Ser Ser Phe Gln Pro Leu Pro Glu
20 25 30
Thr Glu Pro Pro Thr Pro Glu Pro Gly Pro Lys Thr Pro Pro Arg Thr
35 40 45
Met Gln Glu Ser Pro Leu Gly Leu Gln Val Lys Glu Glu Ser Glu Val
50 55 60
Thr Glu Asp Ser Asp Phe Leu Glu Ser Gly Pro Leu Ala Ala Thr Gln
65 70 75 80
Glu Ser Val Pro Thr Leu Leu Pro Glu Glu Ala Gln
85 90

<210> 3159
<211> 2408
<212> DNA
<213> Homo sapiens

<400> 3159
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120
ccctggcaga ctaacgaagc agctcccttc ccacccaac tgcaggctca attttggacg
180
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240
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360
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660
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720
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780

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900
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1020
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1080
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2160
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2280
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2400

tgccatta
2408

<210> 3160
<211> 431
<212> PRT
<213> Homo sapiens

<400> 3160

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			20					25					30		
Glu	Lys	Leu	Leu	Glu	Lys	Tyr	Met	Asp	Glu	Asp	Gly	Glu	Trp	Trp	Ile
		35					40					45			
Ala	Lys	Gln	Arg	Gly	Lys	Arg	Ala	Ile	Thr	Asp	Asn	Asp	Met	Gln	Ser
	50					55					60				
Ile	Leu	Asp	Leu	His	Asn	Lys	Leu	Arg	Ser	Gln	Val	Tyr	Pro	Thr	Ala
65					70					75				80	
Ser	Asn	Met	Glu	Tyr	Met	Thr	Trp	Asp	Val	Glu	Leu	Glu	Arg	Ser	Ala
				85					90					95	
Glu	Ser	Trp	Ala	Glu	Ser	Cys	Leu	Trp	Glu	His	Gly	Pro	Ala	Ser	Leu
			100					105					110		
Leu	Pro	Ser	Ile	Gly	Gln	Asn	Leu	Gly	Ala	His	Trp	Gly	Arg	Tyr	Arg
		115					120					125			
Pro	Pro	Thr	Phe	His	Val	Gln	Ser	Trp	Tyr	Asp	Glu	Val	Lys	Asp	Phe
		130				135					140				
Ser	Tyr	Pro	Tyr	Glu	His	Glu	Cys	Asn	Pro	Tyr	Cys	Pro	Phe	Arg	Cys
145					150					155				160	
Ser	Gly	Pro	Val	Cys	Thr	His	Tyr	Thr	Gln	Val	Val	Trp	Ala	Thr	Ser
				165					170					175	
Asn	Arg	Ile	Gly	Cys	Ala	Ile	Asn	Leu	Cys	His	Asn	Met	Asn	Ile	Trp
			180					185					190		
Gly	Gln	Ile	Trp	Pro	Lys	Ala	Val	Tyr	Leu	Val	Cys	Asn	Tyr	Ser	Pro
		195					200					205			
Lys	Gly	Asn	Trp	Trp	Gly	His	Ala	Pro	Tyr	Lys	His	Gly	Arg	Pro	Cys
		210				215					220				
Ser	Ala	Cys	Pro	Pro	Ser	Phe	Gly	Gly	Gly	Cys	Arg	Glu	Asn	Leu	Cys
225					230					235				240	
Tyr	Lys	Glu	Gly	Ser	Asp	Arg	Tyr	Tyr	Pro	Pro	Arg	Glu	Glu	Glu	Thr
				245					250					255	
Asn	Glu	Ile	Glu	Arg	Gln	Gln	Ser	Gln	Val	His	Asp	Thr	His	Val	Arg
		260						265					270		
Thr	Arg	Ser	Asp	Asp	Ser	Ser	Arg	Asn	Glu	Val	Ile	Ser	Ala	Gln	Gln
		275					280					285			
Met	Ser	Gln	Ile	Val	Ser	Cys	Glu	Val	Arg	Leu	Arg	Asp	Gln	Cys	Lys
		290				295					300				
Gly	Thr	Thr	Cys	Asn	Arg	Tyr	Glu	Cys	Pro	Ala	Gly	Cys	Leu	Asp	Ser
305					310					315				320	
Lys	Ala	Lys	Val	Ile	Gly	Ser	Val	His	Tyr	Glu	Met	Gln	Ser	Ser	Ile
				325					330					335	
Cys	Arg	Ala	Ala	Ile	His	Tyr	Gly	Ile	Ile	Asp	Asn	Asp	Gly	Gly	Trp
			340					345					350		
Val	Asp	Ile	Thr	Arg	Gln	Gly	Arg	Lys	His	Tyr	Phe	Ile	Lys	Ser	Asn

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<400> 3161
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120
ctcaacttgc taaaaatcaa gcatggcgat ttgttggtcc tgtttccctc gagccttgct
180
gggccctcat ctgaaatgga gacgtcagtt ccaccgggct tcaaagtctt tggcgctccc
240
aacgtggtgg aggatgagat tgatcagtac ctcagcaaac aggacgggaa gatttacaga
300
agccgagacc cacagctatg ccgccacggc cctttgggga aatgcgtgca ctgcgtccct
360
ctagagccat tcgatgagga ctatctaaac catctcgagc ctcccgtgaa gcacatgtcc
420
ttccacgcct acatccgga gctgactgga ggggctgaca aggggaagtt tgttgccctg
480
gagaacatca gctgcaagat taagtcaggg tgcgaggggc acctcccgtg gccgaatggc
540
atctgtacta agtgccagcc gagcgccatc acgctgaaca gacagaagta caggcatgtg
600
gacaatatca tgtttgagaa tcacaccgtc gctgaccgct ttcttgactt ctggagaaaag
660
acaggaacc agcatttttg gtacttatac ggacgggtaca cggagcacia agacattccc
720
cttggcatca gggctgaagt ggctgcgatt tatgagccac ctcagattgg tacacagaac
780
agcttgagc ttcttgagga tccaaaagct gaagtggctg atgaaattgc tgccaaactt
840
ggcctgcgga aggttggtg gatatttaca gacctcgtct cagaagatac ccgaaagggg
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accgtccgct acagtcgaaa taaggacacc tatttcctaa gttcagaaga gtgcatcact
960
gcaggagact tccagaacaa gcatcccaac atgtgccggc tctctccaga cggacatttt
1020
ggatccaagt ttgttactgc agtggctaca ggtggctctg acaaccaagt ccactttgaa
1080
gggtaccagg tgtccaatca gtgtatggca ctggtccgtg atgagtgtt gctgccatgc
1140

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<400>	3162															
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1				5					10					15		
Gln	Asn	Asn	Gly	Phe	Ser	Val	Asn	Ile	Asn	Arg	Asn	Lys	Thr	Gly	Glu	
			20					25					30			
Ile	Thr	Ala	Ser	Ser	Asn	Lys	Ser	Leu	Asn	Leu	Leu	Lys	Ile	Lys	His	
		35					40					45				
Gly	Asp	Leu	Leu	Phe	Leu	Phe	Pro	Ser	Ser	Leu	Ala	Gly	Pro	Ser	Ser	
	50					55					60					
Glu	Met	Glu	Thr	Ser	Val	Pro	Pro	Gly	Phe	Lys	Val	Phe	Gly	Ala	Pro	
65					70					75					80	
Asn	Val	Val	Glu	Asp	Glu	Ile	Asp	Gln	Tyr	Leu	Ser	Lys	Gln	Asp	Gly	
				85					90					95		
Lys	Ile	Tyr	Arg	Ser	Arg	Asp	Pro	Gln	Leu	Cys	Arg	His	Gly	Pro	Leu	
			100					105					110			
Gly	Lys	Cys	Val	His	Cys	Val	Pro	Leu	Glu	Pro	Phe	Asp	Glu	Asp	Tyr	
		115					120					125				
Leu	Asn	His	Leu	Glu	Pro	Pro	Val	Lys	His	Met	Ser	Phe	His	Ala	Tyr	
	130						135					140				
Ile	Arg	Lys	Leu	Thr	Gly	Gly	Ala	Asp	Lys	Gly	Lys	Phe	Val	Ala	Leu	
145					150					155					160	
Glu	Asn	Ile	Ser	Cys	Lys	Ile	Lys	Ser	Gly	Cys	Glu	Gly	His	Leu	Pro	
				165					170					175		
Trp	Pro	Asn	Gly	Ile	Cys	Thr	Lys	Cys	Gln	Pro	Ser	Ala	Ile	Thr	Leu	
			180					185					190			
Asn	Arg	Gln	Lys	Tyr	Arg	His	Val	Asp	Asn	Ile	Met	Phe	Glu	Asn	His	
		195					200					205				
Thr	Val	Ala	Asp	Arg	Phe	Leu	Asp	Phe	Trp	Arg	Lys	Thr	Gly	Asn	Gln	
	210					215					220					
His	Phe	Gly	Tyr	Leu	Tyr	Gly	Arg	Tyr	Thr	Glu	His	Lys	Asp	Ile	Pro	
225					230					235					240	
Leu	Gly	Ile	Arg	Ala	Glu	Val	Ala	Ala	Ile	Tyr	Glu	Pro	Pro	Gln	Ile	
				245					250					255		
Gly	Thr	Gln	Asn	Ser	Leu	Glu	Leu	Leu	Glu	Asp	Pro	Lys	Ala	Glu	Val	
			260					265					270			
Val	Asp	Glu	Ile	Ala	Ala	Lys	Leu	Gly	Leu	Arg	Lys	Val	Gly	Trp	Ile	
	275						280					285				
Phe	Thr	Asp	Leu	Val	Ser	Glu	Asp	Thr	Arg	Lys	Gly	Thr	Val	Arg	Tyr	
	290					295					300					
Ser	Arg	Asn	Lys	Asp	Thr	Tyr	Phe	Leu	Ser	Ser	Glu	Glu	Cys	Ile	Thr	
305					310					315					320	
Ala	Gly	Asp	Phe	Gln	Asn	Lys	His	Pro	Asn	Met	Cys	Arg	Leu	Ser	Pro	
				325					330					335		
Asp	Gly	His	Phe	Gly	Ser	Lys	Phe	Val	Thr	Ala	Val	Ala	Thr	Gly	Gly	
			340					345								

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      355      360      365
Met Ala Leu Val Arg Asp Glu Cys Leu Leu Pro Cys Lys Asp Ala Pro
      370      375      380
Val Cys
385

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<210> 3163
<211> 1075
<212> DNA
<213> Homo sapiens
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 120
 tgggggctac cagtggaccc actgactcct ggacatcagg atgctctgcc atggcaaagg
 180
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 240
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 420
 ccctcannng ggtctcatag cgcaccancg aagtcgaggc gcgccccatc gcccgcgccc
 480
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 540
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 660
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 720
 gcacgcgtac caaccgcgc agcaccggcg ggcgggcccc aggcaccac accccggcac
 780
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 900
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 960
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<210> 3164
<211> 94
<212> PRT
<213> Homo sapiens
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<400> 3164

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His Gln Asp Ala Leu Pro Trp Gln Arg Cys Tyr His Pro Cys Ser Ser
          20           25           30
Ser Ser Val Pro Pro Arg Gln Ala Cys Ala Ser Pro Ala Ser Cys Ser
          35           40           45
Ser Ser Ala Ala Xaa Ala Ser Ala Ser Thr Gly Pro Trp His Ser Gly
          50           55           60
Cys Gly Ser Ser Cys Gly Ser Cys Cys Cys Trp Gly Ser Pro Ser Ala
65           70           75           80
Ser Val Gly Val Gly Ala Gly Ala Ile Arg Ser Arg Thr Val
          85           90

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<210> 3165

<211> 2413

<212> DNA

<213> Homo sapiens

<400> 3165

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120
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180
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240
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300
cctctggcag tggcttctac tgctgacctg atacgctgta agctcttgga tgtaactggt
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420
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600
tggtgccgcc aactggagaa cagcctgaga gagacctggg agttggagga gttcagggaa
660
gggatagagg aagaggatca agaggaagat aagaacattg ttgttgatga catcacagaa
720
cagaaaccag agcctcagga tgatgggaaa agtacggagt cagatgtaaa ggccgatgga
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840
ctatatgaaa gagcccgaga actgctggta tcatacgaag aggagcagtt tacggtgctg
900
gagaaattta ggtatttacc taaggccatt aaggcgtgga ataaccgctc cccacgtgta
960
gaatgtgtcc tggcagagct caagggcggt acatgcgaga acagggaggc tgtgctggat
1020

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gcttttctgg atgatggctt ccttggtccc acatttgaac agttggcagc tttgcagata
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gaatatgaag aaaacgtgga cttgaatgac gtcctgggtgc caaagccgtt ctctcagttc
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1980
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2280
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<210> 3166

<211> 717

<212> PRT

<213> Homo sapiens

<400> 3166

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Ser Leu Pro Leu Ser Ala His Gly Ile Val Val Ala Trp Leu Ser Arg
      35           40           45
Ala Glu Trp Asp Gln Val Thr Val Tyr Leu Phe Cys Asp Asp His Lys
      50           55           60
Leu Gln Arg Tyr Ala Leu Asn Arg Ile Thr Val Trp Arg Ser Arg Ser
65           70           75           80
Gly Asn Glu Leu Pro Leu Ala Val Ala Ser Thr Ala Asp Leu Ile Arg
      85           90           95
Cys Lys Leu Leu Asp Val Thr Gly Gly Leu Gly Thr Asp Glu Leu Arg
      100          105          110
Leu Leu Tyr Gly Met Ala Leu Val Arg Phe Val Asn Leu Ile Ser Glu
      115          120          125
Arg Lys Thr Lys Phe Ala Lys Val Pro Leu Lys Cys Leu Ala Gln Glu
      130          135          140
Val Asn Ile Pro Asp Trp Ile Val Asp Leu Arg His Glu Leu Thr His
145          150          155          160
Lys Lys Met Pro His Ile Asn Asp Cys Arg Arg Gly Cys Tyr Phe Val
      165          170          175
Leu Asp Trp Leu Gln Lys Thr Tyr Trp Cys Arg Gln Leu Glu Asn Ser
      180          185          190
Leu Arg Glu Thr Trp Glu Leu Glu Glu Phe Arg Glu Gly Ile Glu Glu
      195          200          205
Glu Asp Gln Glu Glu Asp Lys Asn Ile Val Val Asp Asp Ile Thr Glu
      210          215          220
Gln Lys Pro Glu Pro Gln Asp Asp Gly Lys Ser Thr Glu Ser Asp Val
225          230          235          240
Lys Ala Asp Gly Asp Ser Lys Gly Ser Glu Glu Val Asp Ser His Cys
      245          250          255
Lys Lys Ala Leu Ser His Lys Glu Leu Tyr Glu Arg Ala Arg Glu Leu
      260          265          270
Leu Val Ser Tyr Glu Glu Glu Gln Phe Thr Val Leu Glu Lys Phe Arg
      275          280          285
Tyr Leu Pro Lys Ala Ile Lys Ala Trp Asn Asn Pro Ser Pro Arg Val
      290          295          300
Glu Cys Val Leu Ala Glu Leu Lys Gly Val Thr Cys Glu Asn Arg Glu
305          310          315          320
Ala Val Leu Asp Ala Phe Leu Asp Asp Gly Phe Leu Val Pro Thr Phe
      325          330          335
Glu Gln Leu Ala Ala Leu Gln Ile Glu Tyr Glu Glu Asn Val Asp Leu
      340          345          350
Asn Asp Val Leu Val Pro Lys Pro Phe Ser Gln Phe Trp Gln Pro Leu
      355          360          365
Leu Arg Gly Leu His Ser Gln Asn Phe Thr Gln Ala Leu Leu Glu Arg
      370          375          380
Met Leu Ser Glu Leu Pro Ala Leu Gly Ile Ser Gly Ile Arg Pro Thr
385          390          395          400
Tyr Ile Leu Arg Trp Thr Val Glu Leu Ile Val Ala Asn Thr Lys Thr
      405          410          415
Gly Arg Asn Ala Arg Arg Phe Ser Ala Gly Gln Trp Glu Ala Arg Arg

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420 425 430
 Gly Trp Arg Leu Phe Asn Cys Ser Ala Ser Leu Asp Trp Pro Arg Met
 435 440 445
 Val Glu Ser Cys Leu Gly Ser Pro Cys Trp Ala Ser Pro Gln Leu Leu
 450 455 460
 Arg Ile Ile Phe Lys Ala Met Gly Gln Gly Leu Pro Asp Glu Glu Gln
 465 470 475 480
 Glu Lys Leu Leu Arg Ile Cys Ser Ile Tyr Thr Gln Ser Gly Glu Asn
 485 490 495
 Ser Leu Val Gln Glu Gly Ser Glu Ala Ser Pro Ile Gly Lys Ser Pro
 500 505 510
 Tyr Thr Leu Asp Ser Leu Tyr Trp Ser Val Lys Pro Ala Ser Ser Ser
 515 520 525
 Phe Gly Ser Glu Ala Lys Ala Gln Gln Gln Glu Glu Gln Gly Ser Val
 530 535 540
 Asn Asp Val Lys Glu Glu Glu Lys Glu Glu Lys Glu Val Leu Pro Asp
 545 550 555 560
 Gln Val Glu Glu Glu Glu Glu Asn Asp Asp Gln Glu Glu Glu Glu Glu
 565 570 575
 Asp Glu Asp Asp Glu Asp Asp Glu Glu Glu Asp Arg Met Glu Val Gly
 580 585 590
 Pro Phe Ser Thr Gly Gln Glu Ser Pro Thr Ala Glu Asn Ala Arg Leu
 595 600 605
 Leu Ala Gln Lys Arg Gly Ala Leu Gln Gly Ser Ala Trp Gln Val Ser
 610 615 620
 Ser Glu Asp Val Arg Trp Asp Thr Phe Pro Leu Gly Arg Met Pro Gly
 625 630 635 640
 Gln Thr Glu Asp Pro Ala Glu Leu Met Leu Glu Asn Tyr Asp Thr Met
 645 650 655
 Tyr Leu Leu Asp Gln Pro Val Leu Glu Gln Arg Leu Glu Pro Ser Thr
 660 665 670
 Cys Lys Thr Asp Thr Leu Gly Leu Ser Cys Gly Val Gly Ser Gly Asn
 675 680 685
 Cys Ser Asn Ser Ser Ser Ser Asn Phe Glu Gly Leu Leu Trp Ser Gln
 690 695 700
 Gly Gln Leu His Gly Leu Lys Thr Gly Leu Gln Leu Phe
 705 710 715

<210> 3167

<211> 2730

<212> DNA

<213> Homo sapiens

<400> 3167

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 120
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 180
 gtctggggag tggggaatga ggcgggggtc ggcccggggc tcggagagtg ggcagttgtc
 240
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 300

aaggttgccc ttatcagcag atcaaaggat aaacttgacc aggtttccag tgaaataaaa
360
gaaaaattca aagtggagac aagaaccatt gctgttgact ttgcatcaga agatatttat
420
gataaaatta aaacaggctt ggctggctctt gaaatcggca tcttagtgaa caacgtggga
480
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720
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1920

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 Ser Thr Tyr Asn Gly Asp Ile Arg Glu Thr Arg Thr Asp Gln Glu Asn
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Ser Pro Gln Thr Leu Leu Glu Leu Lys Arg Gln Arg Ala Ala Ala Lys		
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Arg Thr Gly Glu Ser Ser Ser Glu Gly Lys Ala Xaa Leu Ile Gly Gly		
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Arg Thr Ser Pro Tyr Ser Ser Asn Gly Thr Ser Val Tyr Tyr Thr Val		
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<212> DNA

<213> Homo sapiens

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Arg Tyr Ser Val Ser Leu Gly Tyr Gly Phe Tyr Gly Asp Ile Ile
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Lys Asp Ser Glu Lys Lys Arg Trp Leu Gly Leu Ala Arg Tyr Asp Phe
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Ser Phe Leu Pro Ala Gln His Thr Val Gly Ser Pro Arg Asp Arg Lys
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Glu Glu Glu Gln Lys Lys Ala Leu Tyr Gly Leu Glu Ala Ala Glu Asp
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Thr Asn Met Ser Cys Ala Cys Arg Arg Ser Pro Arg Gly Leu Ser Pro
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Ala Ala His Leu Gly Asp Gly Ser Ser Asp Leu Ile Leu Ile Arg Lys
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<212> DNA

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 His Leu Pro Cys Leu Gln Val Gly Gln Glu Gln Lys His Thr Tyr Leu
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 Arg Gly Asn Glu Tyr Gln Pro Ser Asn Ile Lys Arg Lys Asn Lys His
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 Gly Trp Val Arg Arg Leu Ser Thr Pro Ala Gly Val Gln Val Ile Leu
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<210> 3177
 <211> 1857
 <212> DNA
 <213> Homo sapiens

<400> 3177
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<210> 3178

<211> 273
 <212> PRT
 <213> Homo sapiens

<400> 3178

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      35           40           45
Leu Leu Ser Asn Leu Ala Thr Arg Leu Trp Leu Arg Asn Gly Ala Pro
      50           55           60
Val Asn Ala Ser Ala Ser Cys His Val Leu Pro Thr Gly Asp Leu Leu
      65           70           75           80
Leu Val Gly Thr Gln Gln Leu Gly Glu Phe Gln Cys Trp Ser Leu Glu
      85           90           95
Glu Gly Phe Gln Gln Leu Val Ala Ser Tyr Cys Pro Glu Val Val Glu
      100          105          110
Asp Gly Val Ala Asp Gln Thr Asp Glu Gly Gly Ser Val Pro Val Ile
      115          120          125
Ile Ser Thr Ser Arg Val Ser Ala Pro Ala Gly Gly Lys Ala Ser Trp
      130          135          140
Gly Ala Asp Arg Ser Tyr Trp Lys Glu Phe Leu Val Met Cys Thr Leu
      145          150          155          160
Phe Val Leu Ala Val Leu Leu Pro Val Leu Phe Leu Leu Tyr Arg His
      165          170          175
Arg Asn Ser Met Lys Val Phe Leu Lys Gln Gly Glu Cys Ala Ser Val
      180          185          190
His Pro Lys Thr Cys Pro Val Val Leu Pro Pro Glu Thr Arg Pro Leu
      195          200          205
Asn Gly Leu Gly Pro Pro Ser Thr Pro Leu Asp His Arg Gly Tyr Gln
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Ser Leu Ser Asp Ser Pro Pro Gly Ala Arg Val Phe Thr Glu Ser Glu
      225          230          235          240
Lys Arg Pro Leu Ser Ile Gln Asp Ser Phe Val Glu Val Ser Pro Val
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Cys Pro Arg Pro Arg Val Arg Leu Gly Ser Glu Ile Arg Asp Ser Val
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<210> 3179
 <211> 3447
 <212> DNA
 <213> Homo sapiens

<400> 3179

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180

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<210> 3180
<211> 127
<212> PRT
<213> Homo sapiens

<400> 3180
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Thr Gln Thr Asp Gly Arg Asp Val Asn Ser Cys Leu Lys Leu Arg Cys
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Ala Phe Thr Pro Thr Gly Lys Val Lys Leu Thr Phe Val Phe Leu Phe
35 40 45
Asn Asn Phe Met Ile Asn Lys Glu Leu Gln Leu Glu Thr Lys Ala Asn
50 55 60
Ser Arg Asn Ser Leu Thr Pro Ser Cys Pro Met Val Phe Met Ile Ala
65 70 75 80
Cys Tyr Gln Asn Glu Ala Leu Cys Ser Thr Leu Tyr Ser Lys Ala Phe
85 90 95
Tyr Ala Pro Thr Arg Pro Ser Gly Ile Pro Glu Ser Ala Leu His Thr
100 105 110
Gly Arg Lys Thr Ala Ser Ser Tyr Arg Leu Cys Glu Asn Thr Gln
115 120 125

<210> 3181
<211> 287
<212> DNA
<213> Homo sapiens

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120
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180
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<210> 3182
<211> 95
<212> PRT
<213> Homo sapiens

<400> 3182
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Gly His Met Lys Gln Gly Gly Leu Leu Lys Asp Gly Trp Ala Ser Pro

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Cys	Thr	Arg	Ser	Ser	Pro	Ser	Ser	Cys	Trp	Thr	Gly	Thr	Leu	Leu	Gln				
	50						55					60							
Ala	Val	Ser	Ser	Val	Gln	Val	Leu	Ser	Phe	Cys	Leu	Gln	Lys	Val	Cys				
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Ser	Ile	Trp	Cys	Ser	Cys	Leu	Met	Pro	His	Thr	Gly	Asp	Ala	Pro					
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<210> 3183

<211> 1457

<212> DNA

<213> Homo sapiens

<400> 3183

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1200

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 1457

<210> 3184
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 3184
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 20 25 30
 Gln Thr Gln Leu Leu Val Pro Lys Lys Val Leu Pro Glu Ser Cys Arg
 35 40 45
 Leu Ser Trp Asn Leu Leu Gly Asp Glu Ala Ala Ala Glu Leu Ala Gln
 50 55 60
 Val Leu Pro Gln Met Gly Arg Leu Lys Arg Val Asp Leu Glu Lys Asn
 65 70 75 80
 Gln Ile Thr Ala Leu Gly Ala Trp Leu Leu Ala Glu Gly Leu Ala Gln
 85 90 95
 Gly Ser Ser Ile Gln Val Ile Arg Leu Trp Asn Asn Pro Ile Pro Cys
 100 105 110
 Asp Met Ala Gln His Leu Lys Ser Gln Glu Pro Arg Leu Asp Phe Ala
 115 120 125
 Phe Phe Asp Asn Gln Pro Gln Ala Pro Trp Gly Thr
 130 135 140

<210> 3185
 <211> 1433
 <212> DNA
 <213> Homo sapiens

<400> 3185
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 120
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 360

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<210> 3186

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3186

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			20					25					30		
Gly	Leu	Thr	His	Gly	Val	Leu	Val	Ser	Ile	Tyr	Asn	Gln	Ser	Trp	Ser
		35					40					45			
Leu	Arg	Gly	Arg	Ile	Gly	Gly	Trp	Gly	Arg	Val	Asn	Arg	Thr	Cys	His
	50					55					60				
Ser	Ile	Pro	Ser	Pro	Pro	His	Phe	Ser	Leu	Phe	Leu	Gly	Pro	Pro	His
65					70					75				80	
Met	Arg	Glu	Arg	Asp	Lys	Leu	Ala	Gln	Trp	Val	Gly	Ala	Gln	Ile	Gly

	85		90		95										
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<210> 3187
 <211> 860
 <212> DNA
 <213> Homo sapiens

<400> 3187
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<210> 3188
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 3188
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 35 40 45
 Val Val Lys Lys Val Asn Glu Met Ile Val Thr Gly Gln Tyr Gly Arg


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Leu Phe Ala Val Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser
65              70              75              80
Glu Asp Leu Ile Leu Ile Gly Asn Glu Leu Asp Leu Ala Cys Gly Glu
      85              90              95
Arg Ile Arg Leu Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr
      100              105              110
Leu Leu Gly Lys Pro Leu Leu Gly
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<210> 3189

<211> 440

<212> DNA

<213> Homo sapiens

<400> 3189

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<210> 3190

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<212> PRT

<213> Homo sapiens

<400> 3190

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      20              25              30
Gly Ser Ile Leu Asp Ser Pro Ser Gly Pro Val Leu Pro Cys Phe Leu
      35              40              45
Cys Leu Phe Gln Gly Val Leu Ser Asp Leu Thr Lys Val Thr Arg Met
      50              55              60
His Gly Ile Asp Pro Val Val Leu Val Leu Met Val Gly Met Val Met
65              70              75              80
Phe Thr Leu Gly Phe Ala Gly Cys Val Gly Ala Leu Arg Glu Asn Ile
      85              90              95
Cys Leu Leu Asn Phe Val Ser Gly His Arg Asp Lys Ser Gly Ile
      100              105              110

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<212> PRT
<213> Homo sapiens

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Pro Arg Arg Leu Arg Lys Cys Gly Leu Ser Cys Cys Ser Leu Arg Ser
35 40 45
Arg Glu Ser Lys Asp Asp Pro Trp Gln Phe Ser Asp Cys Arg Lys Arg
50 55 60
Ser Arg Ser Met Ala Gln Val Ala Asp Thr Glu Gln Gly Thr Ile Ser
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360

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<210> 3194

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3194

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Lys	Cys	Pro	Ala	Pro	Gly	Ser	Lys	Ser	Val	Phe	Ile	Gln	Thr	Trp	Val
			20					25					30		
Asn	Tyr	Cys	Leu	Pro	Tyr	Val	Val	Pro	Val	Gly	Thr	Pro	Gly	Ala	Ala
		35					40					45			
Gly	Leu	Val	Ile	Pro	Leu	Phe	Pro	Cys	Arg	Pro	Arg	Phe	Thr	Tyr	Phe
	50					55				60					
Pro	Phe	Ser	Leu	Gly	His	Arg	Ser	Cys	Ile	Gly	Gln	Gln	Phe	Ala	Gln
65					70					75				80	
Met	Glu	Val	Lys	Val	Val	Met	Ala	Lys	Leu	Leu	Gln	Arg	Leu	Glu	Phe
				85					90				95		
Arg	Leu	Val	Pro	Gly	Gln	Arg	Phe	Gly	Leu	Gln	Glu	Gln	Ala	Thr	Leu
			100					105					110		
Lys	Pro	Leu	Asp												
			115												

<210> 3195

<211> 987

<212> DNA

<213> Homo sapiens

<400> 3195

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420
cggggaggaa agacgacgat gttgagagca taatgaagaa atacctccag aagtaggaac
480

cagttcagcc tccttgaagc tgcccttgaa gacttcccga ctctacaata acttggagac
 540
 agagagactg gccaggcctc cccggtggcc agagccagcc agcatggcca ccctcaagag
 600
 gcgagatgag cccacagagg catatcctgc ggggatgctg ggctcccagt gtggttggcc
 660
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 720
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 780
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 840
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 900
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<210> 3196

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3196

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Leu	Asp	Tyr	Glu	Arg	Lys	Thr	Lys	Val	Asp	Phe	Asp	Asp	Phe	Leu	Pro
			20					25					30		
Ala	Ile	Arg	Lys	Pro	Gln	Thr	Pro	Thr	Ser	Leu	Ala	Gly	Ser	Ala	Lys
			35				40					45			
Gly	Gly	Gln	Asp	Gly	Ser	Gln	Arg	Ser	Ser	Ile	His	Phe	Glu	Thr	Glu
	50				55					60					
Glu	Ala	Asn	Arg	Ser	Phe	Leu	Ser	Gly	Ile	Lys	Thr	Ile	Leu	Lys	Lys
65				70					75					80	
Ser	Pro	Glu	Pro	Lys	Glu	Asp	Pro	Ala	His	Leu	Ser	Asp	Ser	Ser	Ser
			85					90					95		
Ser	Ser	Gly	Ser	Ile	Val	Ser	Phe	Lys	Ser	Ala	Asp	Ser	Ile	Lys	Ser
			100					105					110		
Arg	Pro	Gly	Ile	Pro	Arg	Leu	Ala	Gly	Asp	Gly	Gly	Glu	Arg	Thr	Ser
			115				120					125			
Pro	Glu	Arg	Arg	Glu	Pro	Gly	Thr	Gly	Arg	Lys	Asp	Asp	Asp	Val	Ala
			130			135					140				
Ser	Ile	Met	Lys	Lys	Tyr	Leu	Gln	Lys							
145					150										

<210> 3197

<211> 5575

<212> DNA

<213> Homo sapiens

<400> 3197

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<210> 3198

<211> 833

<212> PRT

<213> Homo sapiens

<400> 3198

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Lys	Pro	Trp	Ser	Ser	Trp	Ile	Asp	Ala	Ala	Lys	Leu	His	Cys	Ser	Asp
		20						25					30		
Asn	Val	Asp	Leu	Glu	Glu	Ala	Gly	Lys	Glu	Gly	Gly	Lys	Ser	Arg	Glu
		35					40					45			
Val	Met	Arg	Leu	Asn	Lys	Glu	Asp	Met	His	Leu	Phe	Gly	His	Tyr	Pro
	50				55					60					
Ala	His	Asp	Asp	Phe	Tyr	Leu	Val	Val	Cys	Ser	Ala	Cys	Asn	Gln	Val
65					70					75				80	
Val	Lys	Pro	Gln	Val	Phe	Gln	Ser	His	Cys	Glu	Arg	Arg	His	Gly	Ser
			85						90				95		
Met	Cys	Arg	Pro	Ser	Pro	Ser	Pro	Val	Ser	Pro	Ala	Ser	Asn	Pro	Arg
		100					105						110		
Thr	Ser	Leu	Val	Gln	Val	Lys	Thr	Lys	Ala	Cys	Leu	Ser	Gly	His	His
	115					120						125			
Ser	Ala	Ser	Ser	Thr	Ser	Lys	Pro	Phe	Lys	Thr	Pro	Lys	Asp	Asn	Leu
	130					135					140				
Leu	Thr	Ser	Ser	Ser	Lys	Gln	His	Thr	Val	Phe	Pro	Ala	Lys	Gly	Ser
145					150					155				160	
Arg	Asp	Lys	Pro	Cys	Val	Pro	Val	Pro	Val	Val	Ser	Leu	Glu	Lys	Ile
				165					170					175	
Pro	Asn	Leu	Val	Lys	Ala	Asp	Gly	Ala	Asn	Val	Lys	Met	Asn	Ser	Thr
		180						185					190		
Thr	Thr	Thr	Ala	Val	Ser	Ala	Ser	Pro	Thr	Ser	Ser	Ser	Ala	Val	Ser

195	200	205
Thr Pro Pro Leu Ile Lys	Pro Val Leu Met Ser Lys	Ser Val Pro Pro
210	215	220
Ser Pro Glu Lys Ile Leu	Asn Gly Lys Gly Ile Leu	Pro Thr Thr Ile
225	230	235
Asp Lys Lys His Gln Asn	Gly Thr Lys Asn Ser Asn	Lys Pro Tyr Arg
245	250	255
Arg Leu Ser Glu Arg Glu	Phe Asp Pro Asn Lys His	Cys Gly Val Leu
260	265	270
Asp Pro Glu Thr Lys Lys	Pro Cys Thr Arg Ser Leu	Thr Cys Lys Thr
275	280	285
His Ser Leu Ser His Arg	Arg Ala Val Pro Gly Arg	Lys Lys Gln Phe
290	295	300
Asp Leu Leu Leu Ala Glu	His Lys Ala Lys Ser Arg	Glu Lys Glu Val
305	310	315
Lys Asp Lys Glu His Leu	Leu Thr Ser Thr Arg	Glu Ile Leu Pro Ser
325	330	335
Gln Ser Gly Pro Ala Gln	Asp Ser Leu Leu Gly Ser	Ser Ser Gly Ser Ser
340	345	350
Gly Pro Glu Pro Lys Val	Ala Ser Pro Ala Lys Ser	Arg Pro Pro Asn
355	360	365
Ser Val Leu Pro Arg Pro	Ser Ser Ala Asn Ser Ile	Ser Ser Ser Thr
370	375	380
Ser Ser Asn His Ser Gly	His Thr Pro Glu Pro Pro	Leu Pro Pro Val
385	390	395
Gly Gly Asp Leu Ala Ser	Arg Leu Ser Ser Asp Glu	Gly Glu Met Asp
405	410	415
Gly Ala Asp Glu Ser Glu	Lys Leu Asp Cys Gln Phe	Ser Thr His His
420	425	430
Pro Arg Pro Leu Ala Phe	Cys Ser Phe Gly Ser Arg	Leu Met Gly Arg
435	440	445
Gly Tyr Tyr Val Phe Asp	Arg Arg Trp Asp Arg Phe	Arg Phe Ala Leu
450	455	460
Asn Ser Met Val Glu Lys	His Leu Asn Ser Gln Met	Trp Lys Lys Ile
465	470	475
Pro Pro Ala Ala Asp Ser	Pro Met Pro Ser Pro Ala	Ala His Ile Thr
485	490	495
Thr Pro Val Pro Ala Ser	Val Leu Gln Pro Phe Ser	Asn Pro Ser Ala
500	505	510
Val Tyr Leu Pro Ser Ala	Pro Ile Ser Ser Arg Leu	Thr Ser Ser Tyr
515	520	525
Ile Met Thr Ser Ala Met	Leu Ser Asp Ala Ala Phe	Val Thr Ser Pro
530	535	540
Asp Pro Ser Ala Leu Met	Ser His Thr Thr Ala Phe	Pro His Val Ala
545	550	555
Ala Thr Leu Ser Ile Met	Asp Ser Thr Phe Lys Ala	Pro Ser Ala Val
565	570	575
Ser Pro Ile Pro Ala Val	Ile Pro Ser Pro Ser His	Lys Pro Ser Lys
580	585	590
Thr Lys Thr Ser Lys Ser	Ser Lys Val Lys Asp Leu	Ser Thr Arg Ser
595	600	605
Asp Glu Ser Pro Ser Asn	Lys Lys Arg Lys Pro Gln	Ser Ser Thr Ser
610	615	620
Ser Ser Ser Ser Ser Ser	Ser Ser Ser Leu Gln Thr	Ser Leu Ser Ser

625 630 635 640
 Pro Leu Ser Gly Pro His Lys Lys Asn Cys Val Leu Asn Ala Ser Ser
 645 650 655
 Ala Leu Asn Ser Tyr Gln Ala Ala Pro Pro Tyr Asn Ser Leu Ser Val
 660 665 670
 His Asn Ser Asn Asn Gly Val Ser Pro Leu Ser Ala Lys Leu Glu Pro
 675 680 685
 Ser Gly Arg Thr Ser Leu Pro Gly Gly Pro Ala Asp Ile Val Arg Gln
 690 695 700
 Val Gly Ala Val Gly Gly Ser Ser Asp Ser Cys Pro Leu Ser Val Pro
 705 710 715 720
 Ser Leu Ala Leu His Ala Gly Asp Leu Ser Leu Ala Ser His Asn Ala
 725 730 735
 Val Ser Ser Leu Pro Leu Ser Phe Asp Lys Ser Glu Gly Lys Lys Arg
 740 745 750
 Lys Asn Ser Ser Ser Ser Ser Lys Ala Cys Lys Ile Thr Lys Met Pro
 755 760 765
 Gly Met Asn Ser Val His Lys Lys Asn Pro Pro Ser Leu Leu Ala Pro
 770 775 780
 Val Pro Asp Pro Val Asn Ser Thr Ser Ser Arg Gln Val Gly Lys Asn
 785 790 795 800
 Ser Ser Leu Ala Leu Ser Gln Ser Ser Pro Ser Ser Ile Ser Ser Pro
 805 810 815
 Gly His Ser Arg Gln Asn Thr Asn Arg Thr Gly Arg Ile Arg Thr Leu
 820 825 830
 Pro

<210> 3199

<211> 777

<212> DNA

<213> Homo sapiens

<400> 3199

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 60
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 120
 caagcagctc ccacagctgg cactggggaa cgtgggtgaca cccagaagct tggagatgcc
 180
 aggaaccgca aggccccaaa gagagtgtca cagccctggc ttagggagct cctaggtctg
 240
 ggctgcccga agagcaaggg ctcttccttc cttctttctt ttctccttct tgctacctgc
 300
 aacatggcga gcaaggggca tgtctcagcc ctgtttgtga tacagctctt ttagccctgc
 360
 catccagtgg gtcctgagtt cttgtccggc aaccaggaag aatgaggtag ccagacaagt
 420
 gttaggtgac caagacaaag aggagcttta ctgagtgaca atagctcaga ggaggccctg
 480
 gagagggcag ttctcacta cagctgggtca tccgacgtct gctcagctct ggctgagcct
 540
 ggggcttctg tcagcctcag agagggggaa gttcatgctg actggtccat gggcggccat
 600

gggcaggccc agaaaaggca acacaagttc gcactccagt ccacggcact gacagcctgg
 660
 cccccagcct tcagggcctc cctggcctga aggtgggcct caccagggac tcacccccct
 720
 ctgcccagaa acctgtctgc ctctgtctgc cattcatggc gcccaggcta taggtat
 777

<210> 3200

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3200

Met	Leu	Gln	Val	Ala	Arg	Arg	Arg	Lys	Glu	Arg	Arg	Lys	Glu	Glu	Pro
1				5				10					15		
Leu	Leu	Phe	Gly	Gln	Pro	Arg	Pro	Arg	Ser	Ser	Leu	Ser	Gln	Gly	Cys
			20					25					30		
Asp	Thr	Leu	Phe	Gly	Ala	Leu	Arg	Phe	Leu	Ala	Ser	Pro	Ser	Phe	Trp
			35					40					45		
Val	Ser	Pro	Arg	Ser	Pro	Val	Pro	Ala	Val	Gly	Ala	Ala	Cys	Cys	Met
			50					55					60		
Pro	Gly	Pro	Ala	Thr	Ala	Ser	Gln	Arg	Ala	Gly	Ala	Leu	Thr	Ser	Thr
			65					70					75		80
Trp	Ser	Cys	Leu	Pro	His	Cys	Ser	Ser	Arg	Arg	Val				
						85					90				

<210> 3201

<211> 390

<212> DNA

<213> Homo sapiens

<400> 3201

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 120
 gaagccgaca gcctttggga ccgaggtcag cagctgcacc ggcgcaagaa ttccaaacac
 180
 agctgtggct gaagggcctg ggggtgtgca ggtcccaaac ccagtgagc ctgatcccga
 240
 catgggtcct gtctcctggg ggccaccttt gtgtcccggtg gtggctgacc ctgagagggg
 300
 gggctgtggg gatgctcaca tgacactggg gtcccagcga cagcccctcc tcacgtctgcg
 360
 tgtccctggg gcctctcagg agggacgcgt
 390

<210> 3202

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3202

Met Gly Thr Arg Lys Gln Leu Pro Ser Arg Leu Pro Gln Ala Gly Arg

1	5	10	15
Lys Gly His Ala Ala Gly Val Ser Thr Ala Lys Pro Thr Ala Phe			
	20	25	30
Gly Thr Glu Val Ser Ser Cys Thr Gly Ala Arg Ile Pro Asn Thr Ala			
	35	40	45
Val Ala Glu Gly Pro Gly Gly Val Gln Val Pro Asn Pro Ser Glu Pro			
	50	55	60
Asp Pro Asp Met Gly Pro Val Ser Trp Gly Pro Pro Leu Cys Pro Val			
65	70	75	80
Val Ala Asp Pro Glu Arg Glu Gly Cys Gly Asp Ala His Met Thr Leu			
	85	90	95
Gly Ser Gln Arg Gln Pro Leu Leu Thr Leu Arg Val Pro Gly Ala Ser			
	100	105	110
Gln Glu Gly Arg			
	115		

<210> 3203

<211> 1906

<212> DNA

<213> Homo sapiens

<400> 3203

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ngaattcggc acgagctcgt gccgaatcgg caccgagcgcg ggcccaggag cggcaggact
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cgggccggag cgtggccgga cccccacccg ccgagggggcc caggaggagac gcggcagagt
120
cacggtggca gcattgagag ttggacaccc gggtccttga agtgatctct aggccccagc
180
cccaaattccg ccaccattcc gtgctgcggg gacaccatgg ctccagaaga ggacgctgga
240
ggggaggcct tagggggcag tttctgggag gctggcaact acaggcgcac ggtacagcgg
300
gtggaggacg ggcaccggct gtgcggggac ctggtcagct gcttccagga gcgcgccgcg
360
atcgagaagg cttatgcccga gcagttggct gactggggcc gaaagtggag ggggaccgtg
420
gagaagggcc ccagtatgg cacttgagag aaggcctggc atgccttttt cacggcggct
480
gagcggctga gcgcgctgca cctggagggtg cgggagaagc tgcaagggca ggacagtga
540
cgggtgcgcg cctggcagcg gggggctttc caccggcctg tgctgggcgg cttccgcgag
600
agccgggcgg ccgaggacgg cttccgcaag gccagaagc cctggctgaa gaggctgaag
660
gaggttgagg cttccaagaa aagctaccac gcagcccgga aggatgagaa gaccgcccag
720
acgagggaga gccacgcaa ggacagacgc gccgtctccc aggagcagct gcgcaaactg
780
caggaacggg tggaacgctg tgccaaggag gccgagaaga caaaagctca gtatgagcag
840
acgctggcag agctgcatcg ctacactcca cgctacatgg aggacatgga acaggccttt
900
gagacctgcc aggcgcgcga gcgccagcgg cttcttttct tcaaggatat gctgctcacc
960

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ttacaccagc acctggacct ttccagcagt gagaagttcc atgaactcca ccgtgacttg
 1020
 caccagggca ttgaggcagc cagtgcagaa gaggatctgc gctggtggcg cagcaccac
 1080
 gggccaggca tggccatgaa ctggccacag ttcgaggagt ggtccttga cacacagagg
 1140
 acaatcagcc ggaaagagaa ggggtggccgg agccctgatg aggttacct gaccagcatt
 1200
 gtgcctacaa gagatggcac cgcaccccca cccagtcctc cggggtcccc aggcacgggg
 1260
 caggatgagg agtggtcaga tgaagagagt ccccggaagg ctgccaccgg ggttcgggtg
 1320
 agggcactct atgactacgc tggccaggaa gctgatgagc tgagcttccg agcaggggag
 1380
 gagctgctga agatgagtga ggaggacgag cagggctggg gccaaaggcca gttgcagagt
 1440
 ggccgcattg gcctgtaccc tgccaactac gtggagtgtg tgggcgcctg agtgtctga
 1500
 cagcccttct gcaacgttta cccaccctgg ttcagagccc agcttctcct ggagagccgg
 1560
 accctcaggg ccctgaaccg tcgctctctg gctgctcctc tgtcccttga gggaggaagt
 1620
 cctgggaccc agggagggga ggggcctttg tctagggag ggactggtag ggaagggacg
 1680
 agtctaggct gagggcaaga tgggaggtca gaggtgacag aagcgttcag ggtgcctgg
 1740
 gcctccccag gagctgtgga ctcagttcct gacctctgct ttgggggttc tggggtggg
 1800
 ttggggtgag tgtagttctg gcctagcagc accctcttgt ggcttgttct agcgtgtatt
 1860
 aaaacttgac acacaccac acacaaaaac aaaaacacca aaaaaa
 1906

<210> 3204

<211> 424

<212> PRT

<213> Homo sapiens

<400> 3204

Met Ala Pro Glu Glu Asp Ala Gly Gly Glu Ala Leu Gly Gly Ser Phe
 1 5 10 15
 Trp Glu Ala Gly Asn Tyr Arg Arg Thr Val Gln Arg Val Glu Asp Gly
 20 25 30
 His Arg Leu Cys Gly Asp Leu Val Ser Cys Phe Gln Glu Arg Ala Arg
 35 40 45
 Ile Glu Lys Ala Tyr Ala Gln Leu Ala Asp Trp Ala Arg Lys Trp
 50 55 60
 Arg Gly Thr Val Glu Lys Gly Pro Gln Tyr Gly Thr Leu Glu Lys Ala
 65 70 75 80
 Trp His Ala Phe Phe Thr Ala Ala Glu Arg Leu Ser Ala Leu His Leu
 85 90 95
 Glu Val Arg Glu Lys Leu Gln Gly Gln Asp Ser Glu Arg Val Arg Ala
 100 105 110
 Trp Gln Arg Gly Ala Phe His Arg Pro Val Leu Gly Gly Phe Arg Glu

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      115              120              125
Ser Arg Ala Ala Glu Asp Gly Phe Arg Lys Ala Gln Lys Pro Trp Leu
      130              135              140
Lys Arg Leu Lys Glu Val Glu Ala Ser Lys Lys Ser Tyr His Ala Ala
      145              150              155              160
Arg Lys Asp Glu Lys Thr Ala Gln Thr Arg Glu Ser His Ala Lys Ala
      165              170              175
Asp Ser Ala Val Ser Gln Glu Gln Leu Arg Lys Leu Gln Glu Arg Val
      180              185              190
Glu Arg Cys Ala Lys Glu Ala Glu Lys Thr Lys Ala Gln Tyr Glu Gln
      195              200              205
Thr Leu Ala Glu Leu His Arg Tyr Thr Pro Arg Tyr Met Glu Asp Met
      210              215              220
Glu Gln Ala Phe Glu Thr Cys Gln Ala Ala Glu Arg Gln Arg Leu Leu
      225              230              235              240
Phe Phe Lys Asp Met Leu Leu Thr Leu His Gln His Leu Asp Leu Ser
      245              250              255
Ser Ser Glu Lys Phe His Glu Leu His Arg Asp Leu His Gln Gly Ile
      260              265              270
Glu Ala Ala Ser Asp Glu Glu Asp Leu Arg Trp Trp Arg Ser Thr His
      275              280              285
Gly Pro Gly Met Ala Met Asn Trp Pro Gln Phe Glu Glu Trp Ser Leu
      290              295              300
Asp Thr Gln Arg Thr Ile Ser Arg Lys Glu Lys Gly Gly Arg Ser Pro
      305              310              315              320
Asp Glu Val Thr Leu Thr Ser Ile Val Pro Thr Arg Asp Gly Thr Ala
      325              330              335
Pro Pro Pro Gln Ser Pro Gly Ser Pro Gly Thr Gly Gln Asp Glu Glu
      340              345              350
Trp Ser Asp Glu Glu Ser Pro Arg Lys Ala Ala Thr Gly Val Arg Val
      355              360              365
Arg Ala Leu Tyr Asp Tyr Ala Gly Gln Glu Ala Asp Glu Leu Ser Phe
      370              375              380
Arg Ala Gly Glu Glu Leu Leu Lys Met Ser Glu Glu Asp Glu Gln Gly
      385              390              395              400
Trp Cys Gln Gly Gln Leu Gln Ser Gly Arg Ile Gly Leu Tyr Pro Ala
      405              410              415
Asn Tyr Val Glu Cys Val Gly Ala
      420

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<210> 3205

<211> 1482

<212> DNA

<213> Homo sapiens

<400> 3205

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ggctctggcca agacaccctt atctgctctg ggcctgaaac ctcacaaccc agcggacatc
120
ctgttgacc ccacaggaga gccccggagc tatgtggagt ctgtggcacg gacagcggtg
180
gctggacccc gagctcagga ctctgagccc aagagcttta gtgctccagc caccaggccc
240

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tatggccatg agatacccct gaggaacggg accctgggtg gtcctttgt cccccccagc
 300
 cccctctcca ccagcagccc catcctcagt gctgacagca cttcagtggg gagtttcccg
 360
 tcgggagaga gcagtgacca ggggtccccg acgcccaccc agcctctgtt ggagtctggc
 420
 ttccgctcag gcagcctggg acagcccagc ccgtctgccc agagaaacta ccagagctct
 480
 tctcctctcc cgactgtggg cagtagctac agcagccccg actactcact tcagcatttc
 540
 agctcctctc cggaaagcca ggctcgagct cagttcagtg tggctggcgt ccacacggtg
 600
 cctgggagcc ctcaggcgcg tcacagaaca gtgggcacca aactcccc tagtcctggc
 660
 ttcggtggc gggccatcaa tcccagcatg gctgccccca gcagtcccag tttgagccat
 720
 caccagatga tgggtccacc aggcactggc ttccatggta gcactgtctc cagccccag
 780
 agcagtgcag cgaccacccc ggggagcccc agcctgtgtc ggcaccacgc aggggtctac
 840
 caggtttctg gcctccacaa caaagtggcc accaccccg ggagtcccag cctgggcccg
 900
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 960
 cctggaagcc ccagcctggg ccgtcacctc ggagggtctg gatctgtggt tcccggcagc
 1020
 ccctgcttgg accggcatgt ggctatggc ggctattcta ccccgagga tcggagaccc
 1080
 acactgtccc ggcagagcag tgcctctggc taccaggctc ctccacgcc ctccttcct
 1140
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 1200
 gcagccttcc ggcaagggag cccaacacca gccttgccag agaagcgaag gatgtcagt
 1260
 ggagaccggg caggcagcct cccaactat gccaccatca atgggaagg gtcttcgcct
 1320
 gtcgccagcg gcatgtccag tcccagtggg ggcagcacgc tctccttctc ccacactctg
 1380
 cccgacttct ccaagtactc catgccagac aacagcccgg agacgcgggc taaagtgaag
 1440
 tttgtccagg acatttctaa gtattggtac aagcctaaga tc
 1482

<210> 3206

<211> 494

<212> PRT

<213> Homo sapiens

<400> 3206

Xaa Glu Met Glu Gly Thr Ser Pro Ser Ser Pro Pro Pro Ser Gly Val
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 Arg Ser Pro Pro Gly Leu Ala Lys Thr Pro Leu Ser Ala Leu Gly Leu
 20 25 30
 Lys Pro His Asn Pro Ala Asp Ile Leu Leu His Pro Thr Gly Glu Pro

2418

2419

<400> 3209

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 60
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 120
 gaagaatcag cccacagtg caggggtgtg ttagtgggga acgggctctg ggctcctgtg
 180
 ggaaccaggg accccctatc ttggtaccgg tcattggatg tatccccagc tcatgcctgt
 240
 gtctgtcttg gcccggtggg tcaccctgtg ttcattcttc tcccagccat ggcctctcaa
 300
 actgggggtt tcgtctccct atgagggggg cctggtatgt acgcgt
 346

<210> 3210

<211> 95

<212> PRT

<213> Homo sapiens

<400> 3210

Met	Arg	Pro	Ala	Leu	Ser	Leu	Leu	Thr	Trp	Ala	Leu	Pro	Thr	Gly	Lys
1				5					10					15	
Cys	Ser	His	Ser	Arg	Arg	Ile	Ser	Pro	Thr	Val	Gln	Gly	Cys	Val	Ser
			20					25					30		
Gly	Glu	Arg	Ala	Leu	Gly	Ser	Cys	Gly	Asn	Gln	Gly	Pro	Pro	Ile	Leu
		35					40					45			
Val	Pro	Val	Ile	Gly	Cys	Ile	Pro	Ser	Ser	Cys	Leu	Cys	Leu	Ser	Trp
	50					55					60				
Pro	Val	Trp	Ser	Pro	Cys	Val	His	Leu	Ser	Pro	Ser	His	Gly	Leu	Ser
65					70					75				80	
Asn	Trp	Gly	Phe	Arg	Leu	Pro	Met	Arg	Gly	Ser	Trp	Tyr	Val	Arg	
			85						90					95	

<210> 3211

<211> 1728

<212> DNA

<213> Homo sapiens

<400> 3211

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 120
 gtttccttgg ccacgtgca agccagtccg aaggaccagg gactctatta ctgctgcac
 180
 aagaacagct acggaaaagt gactgctgaa tttaacctca cagctgaagt tctcaaacag
 240
 ctgtcaagtc acacagaata ctaaaggatg tgaagagatt gaattcagcc aactcatctt
 300
 caaagaagac ttctccatg acagctactt tgggggccgc ctgcgtgggc agatcgccac
 360
 ggaggagctg cactttggag aaggggttca ccgcaaagcc ttccgcagca cagtgatgca
 420

cgccctcatg cctgtcttca aacctggcca tgcctgtgtg ctttaagggtgc acaatgccat
 480
 tgcctatggg accagaaata atgatgagct catccaaagg aactacaaac tcgctgcccc
 540
 ggaatgctat gttcaaaata ctgccaggta ttatgccaaag atctacgctg ctgaagcaca
 600
 gcctctggaa ggctttggag aagtacctga gatcattcct atttttctta tccatcggcc
 660
 tgagaacaat atcccgtatg ctacagtggg ggaggagctg attggagaat ttgtgaagta
 720
 ttccatcagg gatgggaaag aaataaactt cttgagaaga gaatcagaag ctggtcagaa
 780
 atgttgacc ttccagcact ggggtgtacca gaaaacaagt ggctgcctcc tggtgacgga
 840
 catgcaaggt gtaggaatga agctaactga cgttggcata gcaacgctgg ctaaagggtg
 900
 caagggattt aaaggcaact gttccatgac cttcattgat cagtttaag cactacacca
 960
 gtgtaacaag tattgcaaaa tgctgggact gaaatccctt caaaacaaca accagaaaca
 1020
 gaagcagccg agcattggga aaagcaaagt tcaaacaaac tctatgacag taaagaaggc
 1080
 agggcctgag accccaggcg aaaagaaaac ctaacgtccc cgggtaacct aatggccact
 1140
 ggctagcagc acacaatctc gccagggaaa atctgaggcc acacaggaga gaatatacag
 1200
 cctgcagaga gtgcgtggca atccttactc ccagccgact gtgcgccaag atgcttctaa
 1260
 acccatcacc tgctgtcttc actcaaatga ttccagaaca ggatttgca ccaggtttat
 1320
 ggggagattg aatcaacgat tggctctcaa gacagtccat tctttatata catgttttagc
 1380
 atttttacca acctcacatc atgtgtatat ttgtgtattt gcacatggtt gtgctgtcga
 1440
 ggacctggtg ctgagaagag tctgttcaca gccaaaattc tcccactgt cattcctaac
 1500
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 1560
 atcaagttgt tccactggtg tctaatacgc tattgttgcc ggagggtgggt tctgtgacgt
 1620
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 1680
 taaacaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 1728

<210> 3212

<211> 87

<212> PRT

<213> Homo sapiens

<400> 3212

Ser Gly Asn Ile Lys Leu Ser Tyr Gln Phe Ser Glu Ile His Glu Asp
 1 5 10 15
 Ser Thr Val Cys Trp Thr Lys Asp Ser Lys Ser Ile Ala Gln Ala Lys

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                20                25                30
Lys Ser Ala Gly Asp Asn Ser Ser Val Ser Leu Ala Ile Val Gln Ala
                35                40                45
Ser Pro Lys Asp Gln Gly Leu Tyr Tyr Cys Cys Ile Lys Asn Ser Tyr
                50                55                60
Gly Lys Val Thr Ala Glu Phe Asn Leu Thr Ala Glu Val Leu Lys Gln
65                70                75                80
Leu Ser Ser His Thr Glu Tyr
                85

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<210> 3213

<211> 348

<212> DNA

<213> Homo sapiens

<400> 3213

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acgcgtgaag gggaagcggc ggggtagtaa cagattatgg gcaacagtcc ttttaattaa
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tctaccgtca tcatggctaa tgaggactgt cccaaggctg ctgatagtcc tttttcatca
120
gataaacatg cccaactcat cttggcccaa atcaataaga tgagaaatgg acagcatttc
180
tgtgatgtgc agctgcaagt tggacaggaa agtttttaaag ctcacggct ggttttggtc
240
gccagcagtc cttactttgc agctttgttc actggaggaa tgaaagagtc ctcaaagat
300
gttgtaccga ttctaggaat tgaagcagga atctttcaga tactttcta
348

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<210> 3214

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3214

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Met Ala Asn Glu Asp Cys Pro Lys Ala Ala Asp Ser Pro Phe Ser Ser
 1                5                10                15
Asp Lys His Ala Gln Leu Ile Leu Ala Gln Ile Asn Lys Met Arg Asn
                20                25                30
Gly Gln His Phe Cys Asp Val Gln Leu Gln Val Gly Gln Glu Ser Phe
                35                40                45
Lys Ala His Arg Leu Val Leu Ala Ala Ser Ser Pro Tyr Phe Ala Ala
50                55                60
Leu Phe Thr Gly Gly Met Lys Glu Ser Ser Lys Asp Val Val Pro Ile
65                70                75                80
Leu Gly Ile Glu Ala Gly Ile Phe Gln Ile Leu Leu
                85                90

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<210> 3215

<211> 597

<212> DNA

<213> Homo sapiens

<400> 3215

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 tgcaacactg gggacaagat ggtggagtgc cagctggaga cgcacaacca caagatgggtg
 120
 accttcaagt tcgacttgga cggggacgca cccgatgaaa ttgccacgta tatgggtggag
 180
 catgacttta tcctgcaggc cgagcgggaa acgttcatcg agcagatgaa ggatgtcatg
 240
 gacaaggcag aggacatgct cagcgaggac acagacgccg accgtggctc cgaccagggg
 300
 accagcccg c cacacctcag cacctgcggc ctgggcaccg gggaggagag ccgacaatcc
 360
 caagccaacg cccccgtgta tcagcagaac gtctgcaca ccgggaagag gtggttcatc
 420
 atctgtccgg tgcttgagcc ccccgcccc gagggccctt gaattcttcg cccacttcc
 480
 tctaagctcc ctgccgccag aagccagcca agattcagcg cctataaag accagctgtc
 540
 ctcgaaggaa caaccagct ttctagccag tcagcagctc ctgggccagg cgggccc
 597

<210> 3216

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3216

Thr	Arg	Ala	Arg	Ser	Arg	Gln	Glu	Arg	Ala	Ser	Arg	Pro	Arg	Leu	Thr
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Ile	Leu	Asn	Val	Cys	Asn	Thr	Gly	Asp	Lys	Met	Val	Glu	Cys	Gln	Leu
		20					25					30			
Glu	Thr	His	Asn	His	Lys	Met	Val	Thr	Phe	Lys	Phe	Asp	Leu	Asp	Gly
		35			40						45				
Asp	Ala	Pro	Asp	Glu	Ile	Ala	Thr	Tyr	Met	Val	Glu	His	Asp	Phe	Ile
	50				55					60					
Leu	Gln	Ala	Glu	Arg	Glu	Thr	Phe	Ile	Glu	Gln	Met	Lys	Asp	Val	Met
65				70					75					80	
Asp	Lys	Ala	Glu	Asp	Met	Leu	Ser	Glu	Asp	Thr	Asp	Ala	Asp	Arg	Gly
			85					90						95	
Ser	Asp	Pro	Gly	Thr	Ser	Pro	Pro	His	Leu	Ser	Thr	Cys	Gly	Leu	Gly
			100					105					110		
Thr	Gly	Glu	Glu	Ser	Arg	Gln	Ser	Gln	Ala	Asn	Ala	Pro	Val	Tyr	Gln
		115				120						125			
Gln	Asn	Val	Leu	His	Thr	Gly	Lys	Arg	Trp	Phe	Ile	Ile	Cys	Pro	Val
	130					135					140				
Pro	Glu	Pro	Pro	Ala	Pro	Glu	Gly	Pro							
145						150									

<210> 3217

<211> 2570

<212> DNA

<213> Homo sapiens

<400> 3217

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gactttgtaa agctgcggga aatgctcatt tgtacaaata tggaggacct gcgagagcag
120
accataacca ggcactatga gctttacagg cgctgcaaac tggaggaaat gggctttaca
180
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<210> 3218

<211> 181

<212> PRT

<213> Homo sapiens

<400> 3218

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			20					25					30		
Asn	Met	Glu	Asp	Leu	Arg	Glu	Gln	Thr	His	Thr	Arg	His	Tyr	Glu	Leu
		35					40					45			
Tyr	Arg	Arg	Cys	Lys	Leu	Glu	Met	Gly	Phe	Thr	Asp	Val	Gly	Pro	
	50					55				60					
Glu	Asn	Lys	Pro	Val	Ser	Val	Gln	Glu	Thr	Tyr	Glu	Ala	Lys	Arg	His
65					70				75					80	
Glu	Phe	His	Gly	Glu	Arg	Gln	Arg	Lys	Glu	Glu	Glu	Met	Lys	Gln	Met
			85					90					95		
Phe	Val	Gln	Arg	Val	Lys	Glu	Lys	Glu	Ala	Ile	Leu	Lys	Glu	Ala	Glu
			100					105					110		
Arg	Glu	Leu	Gln	Ala	Lys	Phe	Glu	His	Leu	Lys	Arg	Leu	His	Gln	Glu

	115		120		125	
Glu	Arg	Met	Lys	Leu	Glu	Glu
				Gln	Arg	Arg
				Leu	Leu	Glu
				Glu	Glu	Glu
				Ile		
	130		135		140	
Ile	Ala	Phe	Ser	Lys	Lys	Lys
				Ala	Thr	Ser
				Glu	Ile	Phe
				His	Ser	Gln
145			150		155	160
Ser	Phe	Leu	Ala	Thr	Gly	Ser
				Asn	Leu	Ser
				Lys	Asp	Lys
				Asp	His	Lys
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Asn	Ser	Asn	Phe	Leu		
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<210> 3219

<211> 1241

<212> DNA

<213> Homo sapiens

<400> 3219

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 180
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 1140

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 1241

<210> 3220
 <211> 413
 <212> PRT
 <213> Homo sapiens

<400> 3220
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 Val Asn Gly Gly Xaa Val Thr Ser Glu Arg Glu Thr Asp Ile Leu Asp
 35 40 45
 Asp Glu Leu Pro Asn Gln Asp Gly His Ser Ala Gly Ser Met Gly Thr
 50 55 60
 Leu Ser Ser Leu Asp Gly Val Thr Asn Ile Ser Glu Gly Gly Tyr Pro
 65 70 75 80
 Glu Ala Leu Ser Pro Leu Thr Asn Gly Leu Asp Lys Ser Tyr Pro Met
 85 90 95
 Glu Pro Met Val Asn Gly Gly Gly Tyr Pro Tyr Glu Ser Ala Ser Arg
 100 105 110
 Ala Gly Pro Ala His Ala Gly His Thr Ala Pro Met Arg Pro Ser Tyr
 115 120 125
 Ser Ala Gln Glu Gly Leu Ala Gly Tyr Gln Arg Glu Gly Pro His Pro
 130 135 140
 Ala Trp Pro Gln Pro Val Thr Thr Ser His Tyr Ala His Asp Pro Ser
 145 150 155 160
 Gly Met Phe Arg Ser Gln Ser Phe Ser Glu Ala Glu Pro Gln Leu Pro
 165 170 175
 Pro Ala Pro Val Arg Gly Gly Ser Ser Arg Glu Ala Val Gln Arg Gly
 180 185 190
 Leu Asn Ser Trp Gln Gln Gln Gln Gln Gln Gln Gln Pro Arg Pro
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 Pro Pro Arg Gln Gln Glu Arg Ala His Leu Glu Ser Leu Val Ala Ser
 210 215 220
 Arg Pro Ser Pro Gln Pro Leu Ala Glu Thr Pro Ile Pro Ser Leu Pro
 225 230 235 240
 Glu Phe Pro Arg Ala Ala Ser Gln Gln Glu Ile Glu Gln Ser Ile Glu
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 Thr Leu Asn Met Leu Met Leu Asp Leu Glu Pro Ala Ser Ala Ala
 260 265 270
 Pro Leu His Lys Ser Gln Ser Val Pro Gly Ala Trp Pro Gly Ala Ser
 275 280 285
 Pro Leu Ser Ser Gln Pro Leu Ser Gly Ser Ser Arg Gln Ser His Pro
 290 295 300
 Leu Thr Gln Ser Arg Ser Gly Tyr Ile Pro Ser Gly His Ser Leu Gly
 305 310 315 320
 Thr Pro Glu Pro Ala Pro Arg Ala Ser Leu Glu Ser Val Pro Pro Gly
 325 330 335
 Arg Ser Tyr Ser Pro Tyr Asp Tyr Gln Pro Cys Leu Ala Gly Pro Asn

	340		345		350										
Gln	Asp	Phe	His	Ser	Lys	Ser	Pro	Ala	Ser	Ser	Ser	Leu	Pro	Ala	Phe
	355						360					365			
Leu	Pro	Thr	Thr	His	Ser	Pro	Pro	Gly	Pro	Gln	Gln	Pro	Pro	Ala	Ser
	370						375					380			
Leu	Pro	Gly	Leu	Thr	Ala	Gln	Pro	Leu	Leu	Ser	Pro	Lys	Glu	Ala	Thr
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<210> 3221

<211> 1585

<212> DNA

<213> Homo sapiens

<400> 3221

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<210> 3222

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3222

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			20					25					30		
Gln	Ala	Thr	Gly	Gly	Val	Glu	Pro	Ala	Gly	Trp	Lys	Glu	Met	Arg	Cys
			35					40					45		
His	Leu	Arg	Ala	Asn	Gly	Tyr	Leu	Cys	Lys	Tyr	Gln	Phe	Glu	Val	Leu
			50					55					60		
Cys	Pro	Ala	Pro	Arg	Pro	Gly	Ala	Ala	Ser	Asn	Leu	Ser	Tyr	Arg	Ala
			65					70					75		80
Pro	Phe	Gln	Leu	His	Ser	Ala	Ala	Leu	Asp	Phe	Ser	Pro	Pro	Gly	Thr
				85					90					95	
Glu	Val	Ser	Ala	Leu	Cys	Arg	Gly	Gln	Leu	Pro	Ile	Ser	Val	Thr	Cys
			100					105						110	
Ile	Ala	Asp	Glu	Ile	Gly	Ala	Arg	Trp	Asp	Lys	Leu	Ser	Gly	Asp	Val
			115					120					125		
Leu	Cys	Pro	Cys	Pro	Gly	Arg	Tyr	Leu	Arg	Ala	Gly	Lys	Cys	Ala	Glu
			130					135					140		
Leu	Pro	Asn	Cys	Leu	Asp	Asp	Leu	Gly	Gly	Phe	Ala	Cys	Glu	Cys	Ala
			145					150					155		160
Thr	Gly	Phe	Glu	Leu	Gly	Lys	Asp	Gly	Arg	Ser	Cys	Val	Thr	Ser	Gly
				165					170					175	
Glu	Gly	Gln	Pro	Thr	Leu	Gly	Gly	Thr	Gly	Val	Pro	Thr	Arg	Arg	Pro
			180					185						190	
Pro	Ala	Thr	Ala	Thr	Ser	Pro	Val	Pro	Gln	Arg	Thr	Trp	Pro	Ile	Arg
			195					200					205		
Val	Asp	Glu	Lys	Leu	Gly	Glu	Thr	Pro	Leu	Val	Pro	Glu	Gln	Asp	Asn
			210					215					220		
Ser	Val	Thr	Ser	Ile	Pro	Glu	Ile	Pro	Arg	Trp	Gly	Ser	Gln	Ser	Thr
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Met	Ser	Thr	Leu	Gln	Met	Ser	Leu	Gln	Ala	Glu	Ser	Lys	Ala	Thr	Ile

<210> 3224

<211> 224

<212> PRT

<213> Homo sapiens

<400> 3224

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Val Ile Gly Val Ile Leu Gly Ala Glu Ala Ser Arg Arg Tyr Lys Lys
 35           40           45
Val Ile Pro Gly Ala Glu Pro Leu Ile Cys Ala Ser Ser Leu Leu Ala
 50           55           60
Thr Ala Pro Cys Leu Tyr Leu Ala Leu Val Leu Ala Pro Thr Thr Leu
 65           70           75           80
Leu Ala Ser Tyr Val Phe Leu Gly Leu Gly Glu Leu Leu Leu Ser Cys
 85           90           95
Asn Trp Ala Val Val Ala Asp Ile Leu Leu Ser Val Val Val Pro Arg
 100          105          110
Cys Arg Gly Thr Ala Glu Ala Leu Gln Ile Thr Val Gly His Ile Leu
 115          120          125
Gly Asp Ala Gly Ser Pro Tyr Leu Thr Gly Leu Ile Ser Ser Val Leu
 130          135          140
Arg Pro Gly Ala Leu Thr Pro Leu Gln Arg Phe Arg Ser Leu Gln Gln
 145          150          155          160
Ser Phe Leu Cys Cys Ala Phe Val Ile Ala Leu Gly Gly Gly Cys Phe
 165          170          175
Leu Leu Thr Ala Leu Tyr Leu Glu Arg Asp Glu Thr Arg Ala Trp Gln
 180          185          190
Pro Val Thr Gly Thr Pro Asp Ser Asn Asp Val Asp Ser Asn Asp Leu
 195          200          205
Glu Arg Gln Gly Leu Leu Ser Gly Ala Gly Ala Ser Thr Glu Glu Pro
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<210> 3225

<211> 506

<212> DNA

<213> Homo sapiens

<400> 3225

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 420

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<210> 3226
 <211> 137
 <212> PRT
 <213> Homo sapiens

<400> 3226
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 Cys Phe Pro Val Pro Lys Met Pro Val Pro Cys Ala Leu Gly Glu Glu
 35 40 45
 Leu Val Pro Cys His Arg Gly Thr Gly Pro Ala Val Val Trp Pro Ala
 50 55 60
 Gln Pro Gln Gln Gly Glu Val Glu Pro Gln Pro Gln Pro Thr Gln Arg
 65 70 75 80
 Met Glu Pro Pro Ser Ala Ala Lys Asn Asn His Thr Ala Phe Glu Val
 85 90 95
 Ser His Pro Arg Cys Arg Trp Gly Cys Met Lys Leu His Glu His Gly
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 Met Ser Phe Ile Phe Arg Val Pro Arg Gly His Glu Trp Tyr Gln Asp
 115 120 125
 Pro Trp Arg Cys Pro Trp Phe Pro Met
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<210> 3227
 <211> 1623
 <212> DNA
 <213> Homo sapiens

<400> 3227
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 180
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 1623

<210> 3228

<211> 385

<212> PRT

<213> Homo sapiens

<400> 3228

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 Thr Leu Val Pro Glu Glu Pro Glu Asp Met Trp His Thr Tyr Asn Leu
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 Val Gln Val Gly Asp Ser Leu Arg Ala Ser Thr Ile Arg Lys Val Gln
 35 40 45
 Thr Glu Ser Ser Thr Gly Ser Val Gly Ser Asn Arg Val Arg Thr Thr
 50 55 60
 Leu Thr Leu Cys Val Glu Ala Ile Asp Phe Asp Ser Gln Ala Cys Gln

65 70 75 80
 Leu Arg Val Lys Gly Thr Asn Ile Gln Glu Asn Glu Tyr Val Lys Met
 85 90 95
 Gly Ala Tyr His Thr Ile Glu Leu Glu Pro Asn Arg Gln Phe Thr Leu
 100 105 110
 Ala Lys Lys Gln Trp Asp Ser Val Val Leu Glu Arg Ile Glu Gln Ala
 115 120 125
 Cys Asp Pro Ala Trp Ser Ala Asp Val Ala Ala Val Val Met Gln Glu
 130 135 140
 Gly Leu Ala His Ile Cys Leu Val Thr Pro Ser Met Thr Leu Thr Arg
 145 150 155 160
 Ala Lys Val Glu Val Asn Ile Pro Arg Lys Arg Lys Gly Asn Cys Ser
 165 170 175
 Gln His Asp Arg Ala Leu Glu Arg Phe Tyr Glu Gln Val Val Gln Ala
 180 185 190
 Ile Gln Arg His Ile His Phe Asp Val Val Lys Cys Ile Leu Val Ala
 195 200 205
 Ser Pro Gly Phe Val Arg Glu Gln Phe Cys Asp Tyr Met Phe Gln Gln
 210 215 220
 Ala Val Lys Thr Asp Asn Lys Leu Leu Leu Glu Asn Arg Ser Lys Phe
 225 230 235 240
 Leu Gln Val His Ala Ser Ser Gly His Lys Tyr Ser Leu Lys Glu Ala
 245 250 255
 Leu Cys Asp Pro Thr Val Ala Ser Arg Leu Ser Asp Thr Lys Ala Ala
 260 265 270
 Gly Glu Val Lys Ala Leu Asp Asp Phe Tyr Lys Met Leu Gln His Glu
 275 280 285
 Pro Asp Arg Ala Phe Tyr Gly Leu Lys Gln Val Glu Lys Ala Asn Glu
 290 295 300
 Ala Met Ala Ile Asp Thr Leu Leu Ile Ser Asp Glu Leu Phe Arg His
 305 310 315 320
 Gln Asp Val Ala Thr Arg Ser Arg Tyr Val Arg Leu Val Asp Ser Val
 325 330 335
 Lys Glu Asn Ala Gly Thr Val Arg Ile Phe Ser Ser Leu His Val Ser
 340 345 350
 Gly Glu Gln Leu Ser Gln Leu Thr Gly Val Ala Ala Ile Leu Arg Phe
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 Asp
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<210> 3229

<211> 1008

<212> DNA

<213> Homo sapiens

<400> 3229

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120

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180

aggcgggagg cgctgagagt ctgtgcggag gtccgtggac agactgcttt gctcgttgtt
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 300
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 660
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<210> 3230

<211> 232

<212> PRT

<213> Homo sapiens

<400> 3230

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			20					25					30		
Leu	Lys	Arg	Ile	His	Arg	Ala	Val	Leu	Arg	Gly	Asn	Leu	Glu	Glu	Leu
			35				40					45			
Lys	Tyr	Leu	Leu	Leu	Thr	Tyr	Tyr	Asp	Ile	Asn	Lys	Arg	Asp	Arg	Lys
	50				55					60					
Glu	Arg	Thr	Ala	Leu	His	Leu	Ala	Cys	Ala	Thr	Gly	Gln	Pro	Glu	Met
65				70						75				80	
Val	His	Leu	Leu	Val	Ser	Arg	Arg	Cys	Glu	Leu	Asn	Leu	Cys	Asp	Arg
			85					90					95		
Glu	Asp	Arg	Thr	Pro	Leu	Ile	Lys	Ala	Val	Gln	Leu	Arg	Gln	Glu	Ala
			100					105					110		
Cys	Ala	Thr	Leu	Leu	Leu	Gln	Asn	Gly	Ala	Asp	Pro	Asn	Ile	Thr	Asp
			115				120					125			
Val	Phe	Gly	Arg	Thr	Ala	Leu	His	Tyr	Ala	Val	Tyr	Asn	Glu	Asp	Thr
	130					135				140					
Ser	Met	Ile	Glu	Lys	Leu	Leu	Ser	His	Gly	Thr	Asn	Ile	Glu	Glu	Cys

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Ser	Lys	Asn	Glu	Tyr	Gln	Pro	Leu	Leu	Leu	Ala	Val	Ser	Arg	Arg	Lys
		165						170					175		
Val	Lys	Met	Val	Glu	Phe	Leu	Leu	Lys	Lys	Lys	Ala	Asn	Val	Asn	Ala
		180						185					190		
Ile	Asp	Tyr	Leu	Gly	Arg	Ser	Ala	Leu	Ile	Leu	Ala	Val	Thr	Leu	Gly
	195					200						205			
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<210> 3231

<211> 1367

<212> DNA

<213> Homo sapiens

<400> 3231

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180
tgcattcttg ctacctgttg gtcgaagatg tcggacatcg gagactgggt caggagcatc
240
ccggcgatca cgcgtattg gttcgccgcc accgtcgccg tgcccttggt cggcaaactc
300
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360
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420
tatttgggtc atttatattt cttatatcag tattctacgc gacttgaaac aggagctttt
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540
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660
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780
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1080

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 1367

<210> 3232

<211> 251

<212> PRT

<213> Homo sapiens

<400> 3232

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Tyr	Trp	Phe	Ala	Ala	Thr	Val	Ala	Val	Pro	Leu	Val	Gly	Lys	Leu	Gly
		20					25					30			
Leu	Ile	Ser	Pro	Ala	Tyr	Leu	Phe	Leu	Trp	Pro	Glu	Ala	Phe	Leu	Tyr
	35					40					45				
Arg	Phe	Gln	Ile	Trp	Arg	Pro	Ile	Thr	Ala	Thr	Phe	Tyr	Phe	Pro	Val
	50				55					60					
Gly	Pro	Gly	Thr	Gly	Phe	Leu	Tyr	Leu	Val	Asn	Leu	Tyr	Phe	Leu	Tyr
65				70				75						80	
Gln	Tyr	Ser	Thr	Arg	Leu	Glu	Thr	Gly	Ala	Phe	Asp	Gly	Arg	Pro	Ala
			85					90					95		
Asp	Tyr	Leu	Phe	Met	Leu	Leu	Phe	Asn	Trp	Ile	Cys	Ile	Val	Ile	Thr
		100					105					110			
Gly	Leu	Ala	Met	Asp	Met	Gln	Leu	Leu	Met	Ile	Pro	Leu	Ile	Met	Ser
	115					120						125			
Val	Leu	Tyr	Val	Trp	Ala	Gln	Leu	Asn	Arg	Asp	Met	Ile	Val	Ser	Phe
	130				135					140					
Trp	Phe	Gly	Thr	Arg	Phe	Lys	Ala	Cys	Tyr	Leu	Pro	Trp	Val	Ile	Leu
145				150				155						160	
Gly	Phe	Asn	Tyr	Ile	Ile	Gly	Gly	Ser	Val	Ile	Asn	Glu	Leu	Ile	Gly
		165				170							175		
Asn	Leu	Val	Gly	His	Leu	Tyr	Phe	Phe	Leu	Met	Phe	Arg	Tyr	Pro	Met
	180					185						190			
Asp	Leu	Gly	Gly	Arg	Asn	Phe	Leu	Ser	Thr	Pro	Gln	Phe	Leu	Tyr	Arg
	195					200						205			
Trp	Leu	Pro	Ser	Arg	Arg	Gly	Gly	Val	Ser	Gly	Phe	Gly	Val	Pro	Pro
	210				215					220					
Ala	Ser	Met	Arg	Arg	Ala	Asp	Gln	Asn	Gly	Gly	Gly	Gly	Arg	His	
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<210> 3233

<211> 975

<212> DNA

<213> Homo sapiens

<400> 3233

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 180
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 420
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 480
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 540
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 720
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 780
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 840
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<210> 3234

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3234

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 20 25 30
 Val Met Phe Val Trp Ser Tyr Trp Met Thr Ile Phe Thr Ser Pro Ala
 35 40 45
 Ser Pro Ser Lys Glu Phe Tyr Leu Ser Asn Ser Glu Lys Glu Arg Tyr
 50 55 60
 Glu Lys Glu Phe Ser Gln Glu Arg Gln Gln Glu Ile Leu Arg Arg Ala
 65 70 75 80
 Ala Arg Ala Leu Pro Ile Tyr Thr Thr Ser Ala Ser Lys Thr Ile Arg

2439

85 90 95
 Lys Glu Lys Asn Glu Ile Ile Ala Arg Leu Glu Glu Lys Thr Asn Lys
 100 105 110
 Ile Thr Ala Ala Met Arg Gln Leu Glu Gln Arg Leu Gln Gln Ala Glu
 115 120 125
 Lys Ala Gln Met Glu Ala Glu Asp Glu Asp Glu Lys Tyr Leu Gln Glu
 130 135 140
 Cys Leu Ser Lys Ser Asp Ser Leu Gln Lys Gln Ile Ser Gln Lys Glu
 145 150 155 160
 Lys Gln Leu Val Gln Leu Glu Thr Asp Leu Lys Ile Glu Lys Glu Trp
 165 170 175
 Arg Gln Thr Leu Glu Glu Asp
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<210> 3237

<211> 1323

<212> DNA

<213> Homo sapiens

<400> 3237

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 180
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 300
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 420
 gccatcgacg ctaccgtcgc tgccgagctc ctgaaccatc tgctcgagtc catgccgctg
 480
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 540
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 720
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 1320
 acg
 1323

<210> 3238

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3238

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			20					25					30		
Gly	Arg	Asp	Arg	Val	Gly	Arg	Glu	Asp	Glu	Asp	Arg	Trp	Glu	Val	Arg
		35					40					45			
Gly	Asp	Arg	Lys	Ala	Arg	Lys	Pro	Leu	Val	Glu	Lys	Lys	Arg	Arg	Ala
	50					55				60					
Arg	Ile	Asn	Glu	Ser	Leu	Gln	Glu	Leu	Arg	Leu	Leu	Leu	Ala	Gly	Ala
65					70				75					80	
Glu	Val	Gln	Ala	Lys	Leu	Glu	Asn	Ala	Glu	Val	Leu	Glu	Leu	Thr	Val
			85					90						95	
Arg	Arg	Val	Gln	Gly	Val	Leu	Arg	Gly	Arg	Ala	Arg	Glu	Arg	Glu	Gln
			100					105					110		
Leu	Gln	Ala	Glu	Ala	Ser	Glu	Arg	Phe	Ala	Ala	Gly	Tyr	Ile	Gln	Cys
		115					120					125			
Met	His	Glu	Val	His	Thr	Phe	Val	Ser	Thr	Cys	Gln	Ala	Ile	Asp	Ala
	130					135					140				
Thr	Val	Ala	Ala	Glu	Leu	Leu	Asn	His	Leu	Leu	Glu	Ser	Met	Pro	Leu
145					150					155				160	
Arg	Glu	Gly	Ser	Ser	Phe	Gln	Asp	Leu	Leu	Gly	Asp	Ala	Leu	Ala	Gly
			165					170					175		
Pro	Pro	Arg	Ala	Pro	Gly	Arg	Ser	Gly	Trp	Pro	Ala	Gly	Gly	Ala	Pro
			180					185					190		
Gly	Ser	Pro	Ile	Pro	Ser	Pro	Pro	Gly	Pro	Gly	Asp	Asp	Leu	Cys	Ser
	195						200					205			
Asp	Leu	Glu	Glu	Ala	Pro	Glu	Ala	Glu	Leu	Ser	Gln	Ala	Pro	Ala	Glu
	210					215					220				
Gly	Pro	Asp	Leu	Val	Pro	Ala	Ala	Leu	Gly	Ser	Leu	Thr	Thr	Ala	Gln
225					230					235					240
Ile	Ala	Arg	Ser	Val	Trp	Arg	Pro	Trp							
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<210> 3239

<211> 432

<212> DNA

<213> Homo sapiens

<400> 3239

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 180
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 240
 aacgctgtga atctgtttcc cgtgctgcga gctgtcagcg accaggagag tcaggacggc
 300
 ctctaccaga agtggcagat gatgctggcc tatgcactgc acgtcctccc cttcagcgtt
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 432

<210> 3240

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3240

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		20						25				30			
Arg	Leu	Leu	Gln	Asn	Leu	Ile	Met	Gly	Leu	Phe	Leu	Leu	Phe	Phe	Val
	35					40					45				
Leu	Arg	Val	Arg	Ser	Asn	Val	Leu	Lys	Gly	Ala	Ile	Gln	Asp	Arg	Val
	50				55					60					
Gly	Leu	Leu	Tyr	Gln	Phe	Val	Gly	Ala	Thr	Pro	Tyr	Thr	Gly	Met	Leu
65			70					75					80		
Asn	Ala	Val	Asn	Leu	Phe	Pro	Val	Leu	Arg	Ala	Val	Ser	Asp	Gln	Glu
			85					90					95		
Ser	Gln	Asp	Gly	Leu	Tyr	Gln	Lys	Trp	Gln	Met	Met	Leu	Ala	Tyr	Ala
		100					105					110			
Leu	His	Val	Leu	Pro	Phe	Ser	Val	Val	Ala	Thr	Met	Ile	Phe	Ser	Ser
	115					120					125				
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<210> 3241

<211> 492

<212> DNA

<213> Homo sapiens

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 180
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 240
 cagaggagga catcactgcc acagcagggg gcctgactgg cagcaaaagg gacgactccg
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 360
 cccacccagg caggagcggg gcctggcccc gggcaggcgg gtgggagagc tcaactgagt
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 480
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 492

<210> 3242

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3242

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Leu	Gly	Ser	Ala	Ser	Gln	Thr	Cys	Ser	Gln	Asp	Thr	Arg	Gln	Gln	Gly
			20					25					30		
Gly	Thr	Ala	Gly	Pro	Ala	Ser	Gln	Gly	Arg	Gly	Gly	His	His	Cys	His
		35					40					45			
Ser	Arg	Gly	Pro	Asp	Trp	Gln	Gln	Lys	Gly	Arg	Leu	Arg	Arg	Lys	Val
	50					55					60				
Ser	Arg	Lys	Gln	Asp	Arg	Gly	Trp	Thr	Asn	Gly	Leu	Pro	Gln	Pro	His
65				70					75					80	
Thr	Pro	Pro	Arg	Gln	Glu	Arg	Cys	Leu	Ala	Arg	Gly	Arg	Arg	Val	Gly
			85					90						95	
Glu	Leu	Thr	Glu	Trp	Ala	Ala	Gly	His	Gly	Pro					
			100					105							

<210> 3243

<211> 944

<212> DNA

<213> Homo sapiens

<400> 3243

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 180
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 240
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 300

acttttgggg agaagatggt tattggctgc tttgctaatt ttgagactga agaagtagaa
 360
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 420
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 480
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<211> 314

<212> PRT

<213> Homo sapiens

<400> 3244

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Trp	Ser	Val	Asp	Phe	Ser	Arg	Pro	Gln	Leu	Gly	Glu	Asp	Glu	Phe	Ser
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Tyr	Gly	Phe	Asp	Gly	Arg	Gly	Leu	Lys	Ala	Glu	Asn	Gly	Gln	Phe	Glu
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Asp	Leu	Gly	Val	Ala	Phe	Trp	Ile	Ser	Lys	Asp	Ser	Leu	Ala	Asp	Arg
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Phe	Gly	Gln	Lys	Glu	Glu	Pro	Phe	Phe	Pro	Pro	Pro	Glu	Glu	Phe	Val
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Phe	Ile	His	Ala	Val	Pro	Val	Glu	Glu	Arg	Val	Arg	Thr	Ala	Val	Pro
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225	230	235
Arg Met Lys Gly Leu Glu Glu Pro Glu Met Asp	Pro Lys Ser Arg Asp	
245	250	255
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260	265	270
Ala Ser Arg Thr Lys Arg Asn Phe Ile Leu Asp	Gln Cys Asn Val Tyr	
275	280	285
Asn Ser Gly Gln Arg Arg Lys Leu Leu Leu Phe	Lys Thr Phe Ser Arg	
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<211> 980

<212> DNA

<213> Homo sapiens

<400> 3245

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<210> 3246

<211> 219

<212> PRT

<213> Homo sapiens

<400> 3246

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Asp Val Gly Ala Asp Leu Leu Ser Met Cys Gln Arg Asn Ile Ala Leu
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100 105 110
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115 120 125
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145 150 155 160
Asp Val Thr Cys Glu Ala Tyr Asp His Phe Arg Ser Cys Leu His Ala
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<210> 3247

<211> 977

<212> DNA

<213> Homo sapiens

<400> 3247

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<211> 260

<212> PRT

<213> Homo sapiens

<400> 3248

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		115					120					125			
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	210		215		220										
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<210> 3249

<211> 4487

<212> DNA

<213> Homo sapiens

<400> 3249

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<212> PRT

<213> Homo sapiens

<400> 3250

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Met	Asp	Ser	Glu	Met	Arg	Arg	Leu	Gln	Asp	Phe	Asn	Arg	Asp	Leu	Arg		
	450					455					460						
Glu	Arg	Leu	Glu	Ser	Ala	Asn	Arg	Arg	Leu	Ala	Ser	Lys	Thr	Gln	Glu		
465					470					475					480		
Ala	Gln	Ala	Gly	Ser	Gln	Asp	Met	Val	Ala	Lys	Leu	Leu	Ala	Gln	Ser		
			485						490					495			
Tyr	Glu	Gln	Gln	Gln	Glu	Gln	Glu	Lys	Leu	Glu	Arg	Glu	Met	Ala	Leu		
			500					505					510				
Leu	Arg	Gly	Ala	Ile	Glu	Asp	Gln	Arg	Arg	Arg	Ala	Glu	Leu	Leu	Glu		
	515						520					525					
Gln	Ala	Leu	Gly	Asn	Ala	Gln	Gly	Arg	Ala	Ala	Arg	Ala	Glu	Glu	Glu		
	530					535					540						
Leu	Arg	Lys	Lys	Gln	Ala	Tyr	Val	Glu	Lys	Val	Glu	Arg	Leu	Gln	Gln		
545					550					555					560		
Ala	Leu	Gly	Gln	Leu	Gln	Ala	Ala	Cys	Glu	Lys	Arg	Glu	Gln	Leu	Glu		
			565						570					575			
Leu	Arg	Leu	Arg	Thr	Arg	Leu	Glu	Gln	Glu	Leu	Lys	Ala	Leu	Arg	Ala		
			580					585					590				
Gln	Gln	Arg	Gln	Ala	Gly	Ala	Pro	Gly	Gly	Ser	Ser	Gly	Ser	Gly	Gly		
	595						600					605					
Ser	Pro	Glu	Leu	Ser	Ala	Leu	Arg	Leu	Ser	Glu	Gln	Leu	Arg	Glu	Lys		
	610					615					620						
Glu	Glu	Gln	Ile	Leu	Ala	Leu	Glu	Ala	Asp	Met	Thr	Lys	Trp	Glu	Gln		
625					630					635					640		
Lys	Tyr																